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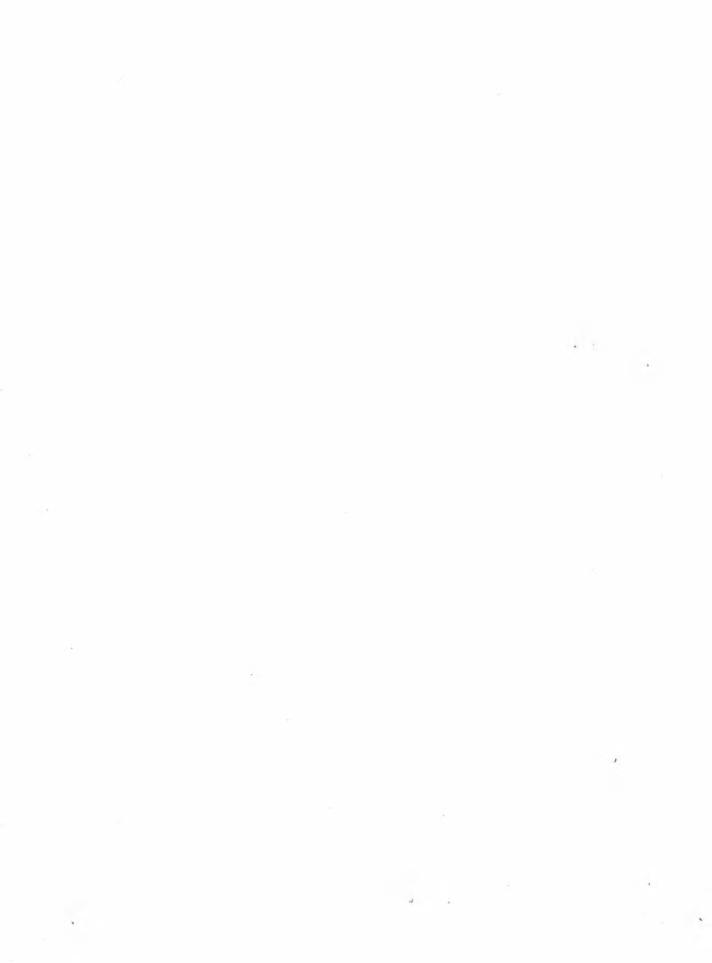
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GREAT BRITAIN AND IRELAND.

XXXIII.

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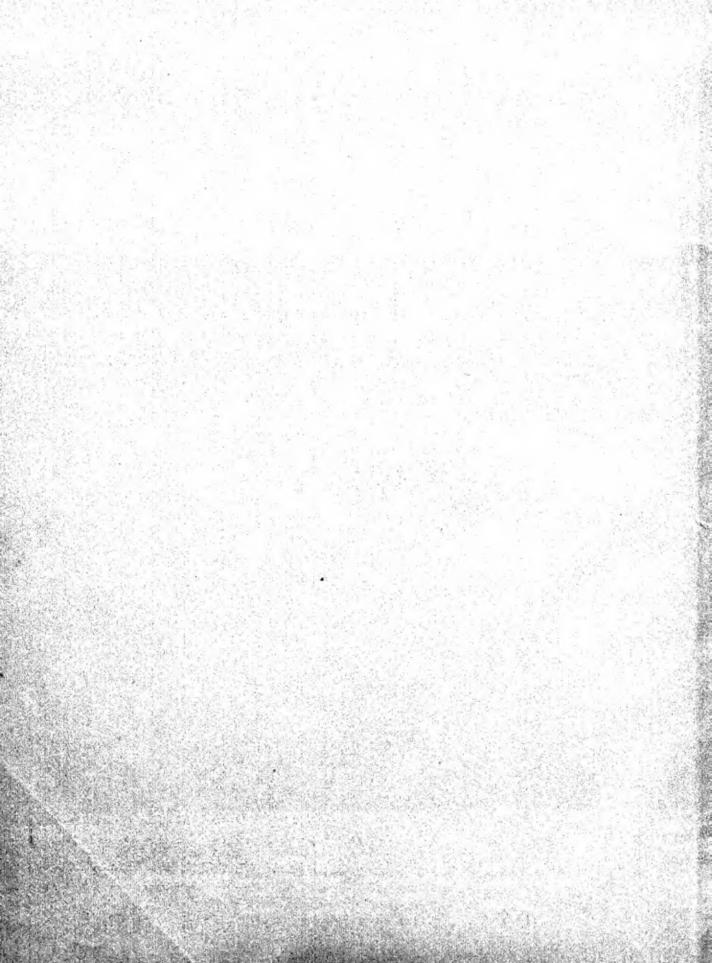
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Given by Sir Joseph Banks to his secretary, Robert Keith Archibald Durham (died 1842), whose eldest son was named Joseph Banks Durham. The Cape passed finally to Robert K. A. Green, of Shrewsbury, grandson of R. K. A. Durham, and then, in 1932, to the Cranmore Ethnographical Museum at Chislehurst JOSEPH BANKS' FEATHER CAPE FROM HAWAII

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

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ORIGINAL ARTICLES.

With Coloured Plate A.

Hawaii.

Beasley: Braunholtz.

Joseph Banks' Feather Cape from Hawaii. By H. G. Beasley and H. J. Braunholtz.

The cape itself measures sixty-two inches round the base, and is twenty-five inches in depth, thus falling into the intermediate series wherein the base-line measurement is that of a full-sized cloak, whilst the shallow depth is that of a cape. The ground work is of red Iiwi feathers (Vestiaria coccinea) whilst the pattern and border are of yellow Oo (Acrulocercus nobilis). body of the foundation is somewhat coarse, but the six-inch border is of finer meshed work. general condition is good, but the colours, particularly the yellow, are somewhat faded.

This cloak came to the Cranmore Museum from Mr. R. K. A. Green. The grandfather of Mr. Green was R. K. A. Durham (died 1842) private secretary to Sir Joseph Banks (died 1820), whose son was named Joseph Banks Durham after his patron, and it may be noted that, preserved with the cape, are original letters from Banks. The connection, therefore, with Banks is fully established.

Unfortunately one cannot connect this cape definitely with either of Cook's voyages, or those made subsequently, such as Portlock, Mears, or Vancouver. It would, however, be safe to presume that Banks maintained his friendship with his old shipmates of the first voyage (1769), and, as a man of science, doubtless took an active interest in all the later voyages, and must therefore have been on friendly terms with many of the officers. When, and from whom, Banks actually received this cloak H. G. BEASLEY. will never be ascertained definitely.

In 1899 and 1903, W. T. Brigham published a detailed illustrated account and list of all the Hawaiian feather cloaks and capes (called Ahuula) known to him at that date, numbering 110 in all. Since then a number of additional cloaks have been published from time to time,2 as they became known, so that our published inventory of extant specimens is probably very nearly complete. This fact gives special point to the publication of the present specimen (Plate A), hitherto unrecorded, apart from the interesting historical information accompanying it, and the excellent state of preservation in which it remains to-day.

It is hardly necessary to go into technological details about the manufacture of these cloaks, since they are well known to museums and collectors and have been fully described in Brigham's work.

But for the benefit of those to whom the Bishop Museum Memoirs are not readily accessible, the following few notes may not be without interest. The names of the birds from which the feathers were taken have already been mentioned. They were frequently captured alive, with the help of birdlime, nets or snares, and released after the desired feathers had been plucked. It is a popular

¹ Mem. of the Bernice Pauahi Bishop Museum. Vol. I. 1899-1903. Honolulu. No. 1: "Hawaiian Feather Work." W. T. Brigham, 1899. No. 5: "Additional Notes on Hawaiian Feather Work." W. T. Brigham, 1903. ² E.g., The Museum Journal, Philadelphia. Vol. XIV. 1923. "Two Hawaiian Feather Garments, Ahuula." H. U. Hall. With colour plates I and II.

delusion that the Oo bird has only two yellow feathers; actually they form axillary tufts, each of which contains from 15 to 20 feathers.

The feathers are attached to a net (nae) of oloná, the twined fibre of Touchardia latifolia, a species of nettle cultivated for the purpose, the bark of which was soaked and scraped. A netting needle was used. The feathers were attached to the net by a finer thread of the same material, the quill being bent double and each part bound on separately. The use of cotton thread is a sure sign of modernity.

These Ahwula were only worn by chiefs and persons of high rank, the size of the cloak or cape being proportionate to the dignity of the wearer. The larger specimens must have been very heavy and hot in a tropical climate, but they were worn without any underclothing, even the normal waist-cloth (or malo) being omitted.

Our first account of these cloaks was given by Captain King³ in his description of Captain Cook's

third voyage, when he discovered the Hawaiian group in January, 1778.

There are 26 Ahuula in the British Museum, presumably the largest existing collection. They include six splendid specimens deposited on loan by King Edward VII in 1903; the two largest of these were brought over to England in 1824 by the ill-fated King Kamehameha II (Liholiho) and his wife Kamamalu, both of whom died in London in the same year.

H. J. BRAUNHOLTZ.

Natal: Fire-Walking.

Sayce.

An Indian Fire-Walking Ceremony in Natal. By R. U. Sayce.

2 Anthropologists who are especially interested in Africa appear to have given almost the whole of their attention to what may be called the African races—Bushman, Bantu, etc.—and to the problems connected with their contact with European immigrants. Those who have given special study to the Indian peoples have sought their field in India. There is in consequence a large body of Indian colonists settled along the whole of the eastern side of Africa who have received very little scientific attention, in spite of the fact that some Indian contacts with Africa were established many centuries ago. In Natal the beginning of the present Indian colony dates back only to 1860. Nevertheless it has a numerical importance almost equal to that of the European element. According to the census report of 1921 the Indians numbered over 140,000. Here are opportunities to study the processes of culture change, but hitherto little appears to have been done.

In 1926 I was in Pietermaritzburg, and noticed a stir among the Indian population. On making enquiries I was told that there was about to be held some sort of ceremony, which I decided to attend. Apart from the Indians themselves the only spectators consisted of about half a dozen Europeans and a few natives, who appeared to have been attracted by mere curiosity, as to a great extent I was myself. It was only after the ceremony had begun that I realized it was something worthy of a serious study. My notes were therefore very incomplete. When I again visited Pietermaritzburg in 1929 I tried to obtain further information. Though it was not possible to see another performance of the ceremony, I was able to get into touch with prominent members of the Indian community, and with individuals who had taken part in the fire-walking. From these I received much courtesy and willing attempts to give me the information I required. The account which is given here is obviously still incomplete, but I have felt that it contains sufficient information to be worth while recording, if only in the hope that it may stimulate further enquiries.

Participants.—Any Hindus may take part in the ceremony. Some came for the purpose from East London. It is probable, however, that they were all of South Indian origin. They were people who had made a vow to walk through the pit during some sickness or misfortune, or whose parents had made such a vow on their behalf, the vows of the father or mother being considered as binding on the children. Childless women might also participate, but nowadays only to a limited extent. These women are no longer allowed to walk over the ashes for fear lest their clothing should catch fire; as is the case also with children, they only proceed around the pit. In 1929 two Europeans took part in the fire-walking under the guidance, so it was said, of a spirit called Father Mazoon.

Time and Place.—The ceremony appears to be performed at three places in Natal. Pieter-maritzburg is the principal centre. Here the ceremony has been performed during the last thirty

years. It is held in this city on Good Friday. A performance is also held near the coast at Umbilo, in the month of Thaipoosam (February), and at Clarewood, where, I was told, it becomes almost more of a social gathering. At Isipingo and Mount Edgecomb sacrifices are made to Kali, but no fire-walking takes place, though there was some intention to introduce it at the latter place.

It was said that the advanced movement among the Indians frowns upon the ceremony, because of the undesirable effect which it is supposed that it may have upon European opinion.

Temple of Mariamin

A

B

2. 0. 2. 4. 6. 8. 10 feet.

Fig. 1. Diagram of the fire-pit. Temple not to scale.

The following notes deal with the ceremony as it is performed at Pietermaritzburg:—

The low-lying parts of the city are occupied by the Indian community, partly because they are not favoured as building sites by Europeans on account of the cold air and fog which collect here on winter nights, and partly because of the alluvial deposits on which the Indians have their market gardens. Here are situated two temples, side by side. One is dedicated to Mariamin, the equivalent of the northern Kali, a goddess of prosperity and fertility. Its door faces eastward, and it opens directly on to the fire-pit, as is shown in Fig. 1. The second temple is that of Soobramonie, the god of fertility and prosperity; it appears to have no connection with the ceremony. Near the temples is a 'syringa' tree, which has been adopted as the local equivalent of the 'neem' tree of India. It appears to be Melia Azedarach. In the early spring it produces sweet smelling flowers, mauve or lavender.

Near the Mariamin temple is the pit, about a foot deep. The small pit, A, is filled with cow's milk, or with milk and water. The milk is given by childless women, or by people who have been sick, and have vowed the milk. Each person brings from two to three gallons. The main pit, B, contains the ashes, and the small one, C, is filled with turmeric water to clean and purify the feet of the fire-walkers when they arrive from the river, and immediately before they step into the hot ashes.

The Temple.—The preparation for the fire-walking lasts ten days. At its commencement a flag, on which a little turmeric water has been sprinkled, is flown from a tall pole inserted into a stone pedestal in front of the temple. The flag is about two feet wide and long enough to be coiled around the whole length of the pole. At the

end which is fastened to the top of the pole is a painting of a bird 2 resembling a game cock, with a spray of flowers in its beak. Every year a new flag has to be used.

Inside the temple, in what would be the position of the principal altar in some Christian churches, is a figure of the goddess, Mariamin, which has been brought from India. The face looked as though it had been smeared with blood, but this appearance was due to crimson paint. The goddess carried a silver bird like a parrot on the left wrist; in her right hand she held a trident; and over her head was the figure of a cobra. In this main shrine was a primitive lamp, consisting of a flat open dish containing castor oil in which a cotton wick was burning.

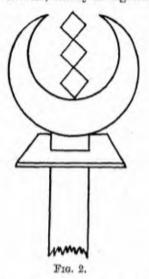
An image similar to the first stood in a small chapel to the left. This one is somewhat smaller

¹ Professor Hodson tells me that this name is probably a dialect version of Mariamma, who, according to Hasting's 'Encyclopædia of Religion and Ethics,' is cuphemistically termed 'mother,' but is more feared

for her wrath than loved for her protection.

² Enquiry as to the species of bird intended to be represented produced no further information. It appeared to be just any kind of bird. (But see below.—ED.)

and is taken out of the temple for processions, when it is decorated with yellow calico 3 and yellow flowers, chiefly marigolds. It appears to have been made locally.



Offerings.—In connection with the ceremony women offer at the temple coconuts, fruit, and incense. The nuts are divided by the priest. One half of each is kept as an offering in the temple, and eventually distributed among the people; the other half is taken home by the women and is eventually eaten. Women also make offerings, at least on the tenth day, of coconuts, camphor, and a particular variety of Spanish lime fruit. The latter fruit is used during the fire-making ceremony, and by the devotees after walking over the hot ashes.

The Preparation.—This lasts for nine days, the fire-walking taking place on the tenth. During this time the devotees must not eat meat. Their diet consists of vegetables, fruit, and especially milk. Bananas are probably the principal food eaten. One of my informants said that he lived entirely on milk and bananas, but the temple officials told me that vegetables and rice were also permitted. The number of meals to be taken appears to be optional. One participant took three meals a day, others take only one.

On all special religious days, e.g., Mondays and Fridays, special pots are used for cooking food. No meat is eaten on these days, nor on days of full moon or during an eclipse. All food eaten by the devotees during

their preparation must be cooked in these special pots. The food must not be eaten off crockery; banana leaves take the place of plates and dishes.

During the preparation there must be complete sexual abstinence, and all purity of thought and act. According to one informant, the devotee must not come into contact with any married people unless they have just bathed, in which case a married person may do certain things, such as cooking, for the devotee. Another denied this, and said that a boy's mother normally looked after him. The devotee must sleep on a new mat. If any covering is used at night it must be new.

The preparation and the ceremony take ten days. Each day is in the special charge of a caste sub-division.4 Each sub-division has one day to perform its ceremonies.

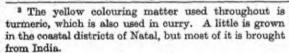
Of the four main caste divisions—Brahmans, Shatryas, Vaisyas, and Sudras—all the following sub-divisions belong to the Vaisyas, who include merchants, traders, and cultivators. The celebrations are performed

on the 1st day by the General Hindu Public,

- 2nd Conars. Naidoos, 3rd4th Padaychee, 5th Cheety, Pillays and Moodleys, 6th
- 7th Pathars (jewellers),
- 8th Indrakoolam,
- 9thReedy.
- General Hindu Public. " 10th

All the devotees, irrespective of their caste sub-division, attend every day's services. They must have a bath every day. The ceremonies in the temple consist of private prayers in the morning. Every evening,

between six and seven o'clock, there is a service at which the priest lectures on the fire-walking and exhorts his hearers to lead a good life. Music is provided morning and evening during the first nine days by a long Indian flute or hauthois.



⁴ The castes are endogamous, but otherwise they mix much more freely than in India. The only barriers are those of religion. The names of the sub-divisions are printed as they were spelt for me by my informants.

Fig. 3.



The priest is not a brahman. At Umbilo he is a pathar, but also practises as a barrister. One of my informants, whose mother tongue was Hindustanee, and who had never participated in the ceremony, said that the man in charge of the temple and the ceremony is not a regular priest, and ascribed this to the lack of brahmans in Natal; but one of the participants says the priest in Pieter-maritzburg lives at the temple, lives on his priestly emoluments, and has no other occupation. This was confirmed at the temple, though when I visited it the second time the priest was away at Umbilo or Isipingo.

The Tenth Day. Nothing is eaten on the final day. About 9 a.m. childless women, who have been prepared in the same way as the fire-walkers, pass round the temple with frequent prostrations. This is done three or seven times in performance of a vow. By the side of each female devotee walks

another woman who pours turmeric water over her.

Those who intend to take part in the fire-walking go to the temple early in the morning. Some go the previous evening and sleep all night in the temple so as to be sure of waking just before sunrise. They then bathe in the temple. Afterwards prayers are said and a cotton thread is tied round the waist of each participant. Just before the fire is lit in the pit a ceremony, consisting of

prayers and hymns to the goddess, is held.

At 10 a.m. the fire-lighting ceremony takes place. It is performed by four men, i.e., the priest, the chairman, the secretary, and the trustee of the temple. The devotees stand about inside the pit, which as yet contains no brushwood. A cult object, about four feet high and which is illustrated in the sketch fig. 2, is placed in the south-east corner of the pit. At it camphor is lit with a match. The burning camphor is then taken to the centre of the pit and brushwood is piled over it. The first fuel is merely a handful of wood, smeared with ghee. It is probably wattle wood (Acacia decurrens) because this burns quite readily. At the fire lighting a lime fruit is cut into four parts. One part is thrown toward the north, one toward the east, one toward the south, and one toward the west.

When the fire has been lit the intending fire-walkers may each add a few twigs, but this appears to be a matter of individual choice. They then go into the temple where the last prayers are said for success. The priest prays and the kneeling devotees take up the responses. At the end a hymn is sung. Then all the devotees, both the fire-walkers and the women, go to the river. There is no definite order in this procession. When they emerge from the temple they keep the pit on their right hand.

From the lighting of the fire to the conclusion of the fire-walking the music of the flutes is reinforced by that of small double drums (fig. 3). The striker, A, is flexible and swings freely so that

it strikes both ends of the drum, which is grasped in the middle with one hand.

Meanwhile the fire in the pit is built up by the general congregation, all the members of which must have bathed that morning. The fuel is supplied by the congregation and consists of from four to eight tons of thorn wood from other species of Acacia. This wood is chosen because its ashes retain heat longer than those of wattle wood, but the latter wood may be used if thorn is not available. At Pietermaritzburg there is no difficulty in obtaining the thorn. It may perhaps be worth mentioning that both the wattle and the thorn trees have bright yellow flowers in the spring. The fire is kept burning until the ashes have accumulated to a depth of about nine inches.

At the River. When the procession reaches the river all the participants—men, women, and children—bathe again. I have not seen this part of the ceremony, and my information is contradictory as to whether the bathers are naked or not. After the bathing the intending fire-walkers dress in calico, dyed with turmeric. For the sake of complete purity some of the children may have no clothing beyond 'syringa' leaves. If leaves are used, and this depends on the will of the

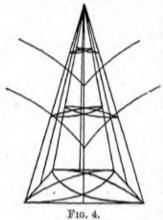
parents, they must be of the 'syringa' tree.

Some of the devotees may now have hooks stuck into their bodies. In some cases long needles may be passed through the tongue and cheeks.⁵ The hooks and needles are all of pure silver, and are made by a pathar, who keeps a stock of them, which can be used year after year. They can only be stuck into a person by a pathar, who before doing so prays and sprinkles holy ashes on the devotee. He also makes a mark with them on the forehead, just about the anthropometric point

⁵ A cinematograph film taken in 1929 showed one man undergoing this. The hooks were stuck into the shoulders.

'glabella,' or along the supraciliary ridges. The ashes are obtained from cow's dung, and are either imported from India or have been made in the temple. They are also used at normal times of prayer.

The priest, or leader, carries on his head a wickerwork structure (fig. 4), which is thickly



covered with flowers, a yellow colour predominating. When he is ready the other participants surround him. Prayers are said to Mariamin, and the priest pours water over all the fire-walkers, each one of whom is given a small bunch of 'syringa' leaves. These are carried in the hands in the procession back to the temple, and may be pressed to the face while passing through the pit of ashes, to protect it from the heat. Some, at least, walk through the ashes without doing this. At the river camphor is again burnt, and more fruit offerings are made. The fruit is then distributed among the onlookers and may be eaten at once.

The people wait at the river until word has been sent to them that the fire is ready. When this has been received, a procession is formed and they all walk back to the temple. The priest leads, followed first by the fire-walkers and then by the women. About this time some of the participants lose consciousness, and are led by their friends. This

may happen to men or women.

Procession of the Goddess: Four men, bathed and therefore purified, take the image of Mariamin from the temple, and move three times round the pit, keeping it on their right hand. Then a goat, which I had first seen tethered near the north-eastern corner of the pit, is taken three times round it. The goddess is then carried about two hundred yards to meet the procession coming from the river. When they all return the goat is slain as a sacrifice to Kali (= Mariamin). This takes place about three feet from the south-east corner of the pit, and is done by one stroke of a sugar-cane knife, the head being severed from the body. The slayer may belong to any of the sub-castes. In Pietermaritzburg it has been done by the same man and his son for the last thirty years. The colour of



Fig. 5. Indians collecting ashes from the pit after fire-walking.

the goat is immaterial. Its blood is not used: it is regarded as an offering to Kali. It used to be customary to kill fifteen goats on this occasion, but the number has been reduced to one by the influence of the advanced movement lest the slaughter should have an undesirable effect on European opinion. At Umbilo a further change has taken place; for the goat there has been substituted a pumpkin, which is sacrificed by being cut in two.

As soon as the goat has been slain, the image of the goddess, which, on re-entering the temple grounds, had been taken near to the south-eastern corner of the pit, is carried two and a half times round it in a clockwise direction, and is

placed near the north-western corner, facing the pit. Then the priest, an elderly man with a dignified and upright carriage, walked slowly three times through the hot ashes, and finally took up a position on the western side of the pit, facing eastward.

One at a time the devotees then followed from east to west toward the temple, walking first through the turmeric water, then through the ashes, and finally through the milk bath. When I saw the ceremony most of the performers appeared to collapse as soon as they got across. They were caught by their friends and carried into the temple. On recovering consciousness they offer their thanks to the goddess. The women and children, who are nowadays not allowed to walk through the ashes, circle round the pit and enter the temple. Then there is a general service of prayer to the goddess. In the temple the devotees are allowed to break their fast, and are given bananas, milk, and lime-fruit water.

Finally the milk from the pit is thrown on to the ashes. After the performers have changed into ordinary clothes a procession is formed, and the goddess, accompanied by music, is taken through a few adjacent streets and then back into the temple.

Some people gather a few ashes from the pit. They may be used just as the holy ashes referred to above, and placed on the forehead at prayer time. I was told that at one time they might be mixed with water and drunk to cure disease.

The process of passing through the ashes appears to have little or no effect on the feet. I examined some feet half an hour after the ceremony and could see no signs of burning. Some of the young men were playing football the next day. Sometimes, it was said, a blister or two may be received as the result of imperfect faith or preparation. Immunity from burning is not due to any unusual toughness of the skin; some of the participants have been accustomed to wearing boots all their lives just like Europeans.

According to my informants, of the two white men who took part in the ceremony in 1929 one got off with a blister; but the other, whose attention was attracted by some of his friends in the crowd calling to him as he was passing through the ashes, had to jump out of the pit. His feet were rather badly burned, and he was confined to bed for some time.

R. U. SAYCE.

Sudan: Magic.

Driberg.

Divination by Pebbles. By J. H. Driberg.

The system described here is that employed by the Didinga. It is also found among the Acholi—but not, I believe, among the Lotuko or other neighbours of the Didinga. Among the Acholi, however, divination by pebbles is confined to professional practitioners, and any desiring to know the future have to apply to them. Among the Didinga anyone may take the omens in this way, either for himself or for a friend, and they place implicit reliance on the correctness of the forecast which the pebbles reveal. On one occasion, when I was proposing a journey on the following morning to a disturbed settlement, I threw the pebbles in the prescribed manner and three successive throws signified disaster. I then handed them to a Didinga to throw on my behalf and again the omens were as bad as they could be. The men who were to accompany me were reluctant to do so, and everyone tried to dissuade me from my journey. Unfortunately I refused to be dissuaded, and this method of divination received a gratuitous advertisement from the fact that three of my men were killed and two wounded.

This method of divination is called by the Didinga toöto, and to take the omens is ruko toöto. Forty-eight pebbles, preferably of quartz (always left conveniently ready by their owner in a small gourd), are first counted into twelve groups of four in order to see that the full number is there. They are then gathered into the two hands, and the person desiring to divine the future shakes them slowly in his hands, murmuring the object of his inquiry (it must be a specific object) in a liturgical tone. For example, "I am going on a journey to-morrow to Lomongoli"—with the implied question "is it "an auspicious day and direction?"

Should the owner of the pebbles prefer to ask another to take the omens on his behalf, possibly from a presentiment that he is going to throw unluckily, he will first hold the pebbles in his own hand to impregnate them with his personality, and while murmuring the object of his inquiry will press his hands to his heart and forehead before passing the pebbles over to the other, who will then proceed in the usual manner.

The pebbles are thrown up gently into the air two or three times from the open palms in order that they may be well mixed and after they have been shaken up in this way they are caught in the

left hand, a few being abstracted by the right. These are examined, and if they number four or a multiple of four, they are returned to the other pebbles and the divination starts again. It must be noted that four pebbles in the right hand always stops the divination, but if there are fewer pebbles than four, they are placed together on the ground. If there are more than four, but not a multiple of four, the four pebbles or their multiple are returned to the left hand, and the balance, 1, 2 or 3, are placed together on the ground. The pebbles are then tossed up again, and some are abstracted and placed on the ground in a separate group behind their predecessors. This is done again and again until an even four pebbles in the right hand terminates the divination. The pebbles on the ground, arranged in a line of groups, each consisting of 1, 2 or 3 pebbles, are then attentively examined and the omens declared according to the formation of the groups.

The following examples, in which the numerals stand for the number of pebbles in each group, will illustrate the method. Interpretation is not at all easy, as with the exception of three, which is a lucky number symbolizing the three stones under the cooking pot, the numbers carry meanings which are not constant. They appear to vary according to the pattern of the throw and according to the question which the pebbles have to answer. Any throw, however, ending with three is lucky.

Example I.—3, 3, 3 It will be a good journey and there will be plenty to eat. The interpretation

of this is, of course, obvious.

Example II.—3 men; 1 cattle; 1 cattle; 2 cattle tracks; 3 men; 1 stick for driving cattle. If you go on your raid, you will be successful and obtain many cattle. Here the explanation depends partly on the 3's and partly on the pattern taken by the pebbles.

Example III.—1 self; 2 women; 1 acceptance; 3 luck. You will have a successful

affair without any unpleasant consequences.

Example IV.—1 self; 2 women; 1 acceptance. This is the same as III without the lucky 3 to end with. The meaning is that trouble will come of your affair as the woman will conceive a child by you.

Example V.—2 cattle tracks; 3 men; 1 stick for driving cattle; 3 very many cattle; 1, 1, 1, 1 cattle dung indicating large herds; 3 men; 2 conquered enemy. Foretells a very successful raid. The general pattern of the pebbles is largely responsible for the interpretation.

Example VI.—3, 3 the enemy whom you are raiding are in good order—they have the lucky number; 1 enemy spears; 2 your comrades holding their hands to their mouths in sorrow; 3, 1, 2 our men defeated and retiring in disorder (had the 3 fallen last, the interpretation would have been very different). An unsuccessful raid is predicted.

Example VII.—3 male animals; 1 spear; 3 male animals; 1 spear; 2 female animals; 2 female animals; 1 knife for skinning. Very good hunting. You will first kill male animals

and later in the day several females.

Example VIII.—1 teeth of lion; 1 teeth of lion; 3 man killed by lion (3 here symbolizes the funeral meal being cooked); 1 man who kills lion; 2 men; 2 men; 1 men. A disastrous hunt. A lion will attack and kill several hunters before it is itself killed.

Example IX.—1 neck of giraffe; 3 men; 1, 1, 1 backbone of giraffe; 2 men; 1 knife for skinning. A giraffe will be killed at the hunt. This example best illustrates the graphic interpretation of the pebbles, depending entirely on the pattern of the completed throw.

Example X.—2 mouth with which you drink; 1 bowl of beer; 2 men; 1 beer; 2 men; 3 men after a good meal; 1 food. If you go on your journey, you will find plenty of beer and

food at the end.

Example XI.—1 bull; 1 bull; 3 cattle; 1 stick for driving; 2 cattle tracks; 3 men; 1, 1, 1, 1 cattle dung; 2 men; 2 men; 1 stick for driving. A very successful raid with much booty. Compare Example V.

Example XII.—1, 1, 1 open and empty country; 3, 3, 3 our men. An unsuccessful raid. We

shall go a long way and find nothing.

Example XIII.—2 sick man who will die; 1, 1, 1, 1 sickness (representing panting breath); 3 fire at which the sick man sits; 2 men watching him. The man on whose behalf the inquiry is made will shortly die.

Example XIV.—3 men; 2 bowls of food; 1, 1 men eating; 2 men; 3 more men, in lucky order. A good journey and plenty of food.

Note 1.—An analagous, but different, system of divination is found among the Akamba. Cf. Man, 1928, 137. It is worth noting, however, that among the Akamba also the number 3 is lucky and for the same reason as is given by the Didinga. A pebble game of the Mangbetu is described by Mr. P. T. L. Putnam in Man, 1930, 59, but the only relevance that it appears to have in connection with the Didinga system of divination is that a 4 or a multiple of 4 always closes the play.

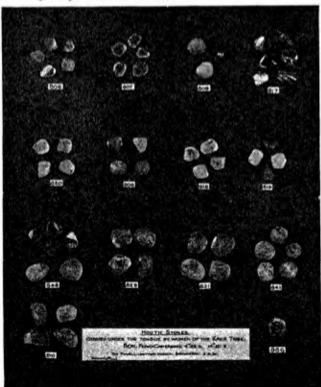
NOTE 2.—The Didinga also have a pebble game called Dae eth dae khoñ (give sheep, give goat). It is interesting as it gives evidence of a rudimentary mathematical ability. Presumably every Didinga knows what the result will be as the two players respectively wager a hypothetical goat or a hypothetical sheep, and none except small children is ever surprised at the result. It is really a method of teaching children a mathematical law, rather than a game. Forty-eight pebbles (not the pebbles which are used for divination) are employed and each player takes 24, muttering dae eth or dae khoñ. They are then laid out in parallel columns two at a time, making 12 groups of 4 pebbles each. One of the players takes into his hand a single pebble from the twelfth group and the other picks up the remaining three pebbles. They then pick up the pebbles from the beginning, taking two at a time in turn, till all the pebbles have been picked up. Each player lays his pebbles down in fours, and the one who took up a single pebble finds that he has three left over, while the one who took up three pebbles finds one left over. All except children who have not been taught know what the explanation is. A similar game occurs among the Nuer. Cf. 'Nuer Customs and Folklore,' by J. H. DRIBERG. Ray Huffman, p. 66.

Cameroons: Ethnology.

Powell-Cotton.

Note on the Native Custom of Carrying Stones in the Mouth, collected Feb.-March, 1932, French Cameroons.

By Major Powell-Cotton.



The women of the Kaka tribe inhabiting the forest country south of Beri (4.22 N. lat. 14.20 E. lon.) on the Bertoua-Batouri motor road, in the French Cameroons, have the habit of carrying small stones under the tongue.

Out of fifteen sets of 'stones' which I collected the number varied from 3 to 6, but was usually four. They are called 'Talembe Etanou' in the Kaka language.

Some are pieces of green or white glass bottles, others crystals, pebbles, or lumps of resin, and vary in size from No. 7, $11 \times 8 \times 3$ cm. to No. 848, $23 \times 21 \times 9$ cm., while the 'set' will weigh from 1 dr. 10 grs. to 5 dr. 1 gr.

The girls begin carrying them at quite an early age, and only remove them at night.

The reason they give for the custom is to ensure fruitfulness. Women who are good friends exchange stones with one another as a greeting.

In old age they divide the stones among their female children, or if they have none, then amongst their nearest female relatives. At death the same scheme of division is followed.

The stones often have sharp edges and angles, and strike one as being most uncomfortable to retain under the tongue.

P. H. G. POWELL-COTTON.

Borneo: Technology.

A Kelabit Basket. By J. C. Swayne.

5 The baskets illustrated are made by Kelabits, a little-known tribe in Sarawak, who are assumed to be the southernmost representatives of the Muruts in Borneo. They are in an unusual technique which has not been found elsewhere in Sarawak, and it would be of great interest to know from where it was derived.

The measurements of the basket in fig. 1 are: Total height, 12 inches; height to shoulder, 7 inches; diameter at bottom, 12 inches; diameter at neck, 6 inches; circumference of body-work, 40 inches; circumference of neck, 19 inches. The bottom consists of 19, the sides of 24 and the shoulder to the top, of 21 rings.

The whole basket appears to consist of one piece of rotan over 150 feet in length (native workers have pointed out to me that any basket-maker is an



FIG. 1.



F1G. 2.

adept at hiding joins and this may consist of more than one piece; however, there is no external evidence of this and it would, I think, be easier to work one piece than several).

As I have seen finished specimens only, the manufacture is conjectured. All the material is of prepared rotan (rotan sega). The body-work is of rotan from which the outside skin has been scraped; the uprights are of split rotan and the binding wefts made from the hard skin. Presumably the material is first given a prolonged soaking in water as this would make it more pliable. The rings are

then bent to form the body; it is possible that they are held in place by string, which is subsequently removed, as is done in other forms of basketry. Two split rotans cross each other at right angles at the bottom and form the four main uprights, four more are added from the third ring and eight from the seventh, presumably to prevent an awkward lump on the bottom; as it is, the basket stands perfectly level. These uprights pass over the top and are continued inside; the juncture is invisible. A single weft of rotan skin is then worked up each upright, first being knotted on to a ring and then looped round an inner and outer upright. At the top these wefts are finished off in a figure of eight over the two top rings. A close fitting cover, three inches in depth, is made in the same way. A handle of unsplit rotan passes through two loops at the bottom and two on one side and three on the other. This makes it convenient for carrying in the hand or hanging up in the house. The whole is coloured a dark brown by smoking over a fire; that this was done after the basket was finished is evident by the natural colour showing where a knot has slipped.

Mr. Andreini, of the Sarawak Civil Service, whom I have to thank for bringing back these baskets from the Baram river, informs me that the local name is *belalong* and that they are commonly used for carrying light articles, vegetables and jungle fruits. Fig. 2 is a slightly taller basket with holes cut at top and bottom to adapt it for a hen-coop. Both baskets are now in the Sarawak Museum.

J. C. SWAYNE.

Crowfoot.

Sudan: Technology.

Pot Making in Dongola Province, Sudan. By J. W. Crowfoot, C.B.E., F.S.A.

At Nawi, near Khandak, two techniques were seen, one purely by hand, the other with

the use of a primitive wheel.

The hand technique was employed for

making pots with spouts and handles (ibriks) (see fig. 1).

Clay. This consisted $\frac{1}{3}$ clay from the neighbourhood, $\frac{1}{3}$ limestone (gir), and $\frac{1}{3}$ pounded potsherds ground on a quern. It was mixed the night before. This mixture was used for the whole of the pot except the bottom in which no clay was used because it might be exposed to fire.

Process. A hollowed stone was used as a support (sanad) and the clay flattened on the stone. The potter then took an old disk-shaped potsherd (the galib), laid the clay on the disk, which rests on the stone, and turned up the edge. He then applied a large coil composed of the whole mixture and worked this up with his fingers, which he dipped continually in a gourd full of pounded pot dust. He finished half the body of the pot in fifteen minutes, then smoothed it with a reed and set aside to dry. The time it takes to dry varies, naturally. When dry he added a second coil, and so on until the whole was shaped like a hollow ball without any opening. He smoothed this all over with a splinter of split reed. Time taken: ten minutes. Then he added the pattern, produced by stroking the body of the pot with a



FIG. 1. DONGOLA POT CALLED IBRIK.

splinter of palm reed wound round with a coarse thread. Then he pierced a hole in the top for the neck.

The neck is shaped separately, like a small tube, pierced with a reed and enlarged with the finger. When it is dry it is set over the hole already made in the body of the pot and firmly fixed with a reed still inside. The neck is then smoothed with a smoother and titivated, the reed being removed to let the fingers work inside and then replaced. Next a spout is made solid, the hands being dried with powder, and the spout stuck solid on the side of the jar. A ball of clay is put on between the spout and the neck for ornament. Then the handle is added in the same way; at first it is stretched in a straight line, then brought over above the neck, the base fixed firmly and the top stuck under the brim of the neck, small bits being added which extend it half round the neck. The usual smoothing operations are performed with a split reed, then a blob added on top of the handle. Then the spout is pierced and finally the reed is removed from the neck.

These pots take twenty-four to thirty hours to dry in the shade.

The reddening is done with a reddish clay called *kair*, which is ground on a hollow stone, mixed with water and dabbed on to the neck with the finger, and to the other smooth parts. When it is dry enough the reddened part is polished with a pebble, both at top and bottom.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Ordinary Meetings of the Institute.

Life in the French Congo. Summary of a Communication presented by Madame Gabrielle M. Vassal. 22 November, 1932. (Prepared by R. C. Johnston.)

Brazzaville, where Dr. Vassal was stationed as Director of Health, is situated on the Congo, at the point where the river broadens out into Stanley Pool.

The staple food of the Congolese people is manioc. They are underfed and the general mortality remains high, and there is a continual danger of famine, accentuated by the transport difficulties.

Films taken by Dr. Muraz were shown. They dealt with the beliefs and superstitions of the Sara tribes living in the Chad and Ubangi-Shari territories. The Sara are a strong, prolific race, coming from Bahr el Ghazal, and speaking a language resembling the Dor (Bongo) tongue. There are many tribes, and of these the Sara Djingé are well known for the mutilation of the lips of their women. The lips are stretched out by circles of wood. The film shows this operation, which is performed by the betrothed man.

A section of the film dealt with the Hyondo, one of the secret societies of the Sara people. The Sara believes that he is born with two souls, one being the 'Koï' or evil spirit. The object of the Hyondo is to get rid of 'Koï,' and to this end the Sara goes through a two-year period of initiation into the society. It is considered impossible for a woman to lose her 'Koï,' and, consequently, women are never admitted to the Hyondo society.

Flagellation is distasteful to 'Koï,' and the film shows two men lashing each other furiously and in deadly earnest, while the onlookers seem more than a little amused. The evil spirit is often equated with some animal, and the men, in order to obtain deliverance, dress themselves in a disguise that resembles the particular form their 'Koï' is taking. They walk in a crouching manner and are led by one of the old Hyondos. Special dances, such as Lion, Monkey, Hyæna and Bird dances, are performed. 'Koï' is blamed for causing deaths in the village, and in one most interesting section of the film was shown a Sara woman who had died in childbed, surrounded by mourners. The women beat themselves and dash themselves violently on the ground in order to punish 'Koï.'

Before marriage, Sara girls are subjected to a mutilation (clitoridectomy), and the film showed an

old woman performing this operation with a triangular knife.

A long section of the film dealt with the tattooing and the forms of loin-coverings met with in these parts. In the tattooing, the patterns are formed by raised cicatrization, parallel lines, undulating lines, lozenges and star-shaped designs being beautifully worked on the cheeks, chest, shoulders, arms and backs, whilst some examples of very complicated tattooing round the navel were also represented. The loin-coverings varied from a few giraffe hairs and strings, with or without beads, to an elaborate covering called the 'Gol,' in the shape of a phallus. The 'Gol' is made of vegetable fibres, bound

round with thin strings, and is shaped in a curve that exactly fits the line from anus to vagina, covering both orifices, and then protrudes some four or six inches forward. This is kept in position by a kind of network called the 'Gogne,' and by this strange means the Sara Yamodo women say that they shut the doors of their bodies to 'Koï.'

It is the first time that many of these things have been seen by a white man, and the film is a most curious and interesting document.

The Diversity of Culture in Melanesia. Summary of a Communication by W. G. Ivens, Litt.D. 8 December, 1932.

The parts of Melanesia under consideration, viz., the northern New Hebrides, Banks, southern and central Solomon Islands, may be taken as forming a cultural unit. The culture in this area shows clear traces of foreign admixture, and cannot be regarded as primitive or pure. Many of the terms used to describe 'soul' or 'spirit' or 'shadow' or 'reflected image' are derived from Indonesian or Tagalog or Malagasy words meaning 'soul or spirit,' 'soul or shadow,' 'ancestor,' 'incantation,' 'supplication'; while some of the words for 'breath' or 'life' are also Indonesian.

On San Cristoval there is evidence of the presence of the Indonesian idea of 'soul-substance,' and, inferentially, this is true also of other parts. Mota, with San Cristoval, has beliefs with regard to 'soul-substance' being in objects, while on San Cristoval man is said to have two souls. The occurrence of ideas of 'soul-substance,' and of the duality of the soul, shows that Melanesian culture cannot be regarded as primitive.

In parts of the Solomons there are dual homes of the dead, the newer home being given the premier place as being the centre of an introduced culture. Three places in the Solomons speak of a

ship of the dead ' carrying souls to the newer home of the dead.

The worship of the native peoples in Melanesia is concerned with (a) ghosts, (b) spirits, i.e., beings not considered to have once been men. Also in the Solomons there is a worship of sharks and snakes, incarnations of ancestors or of 'spirits,' together with a worship of 'spirits' connected with the bonito-fishing. The 'spirits' of the Banks Islands may well be immigrants who introduced the social club, the sukwe, or the secret society, the tamate, while the 'spirits' of the Solomons may be immigrants who introduced the bonito-fishing and the cult of the frigate-bird. The original worship of 'ghosts' has been overlaid or added to by cults introduced from without, or by the worship of those who introduced outstanding features of the local cultures.

It is doubtful if mana is of Melanesian origin. Its main association there is with persons rather than with objects, and only in the Mota area is there a definite connection between mana and objects, though it is held on San Cristoval that spiritual or psychic power may reside in objects. One is inclined to think that mana is rather connected with the Indonesian idea of 'soul-substance,' or with psychic powers. The word mana is probably connected with Javanese wenang, power, powerful,

měnang, to overcome.

Evidence of migration into Melanesia is provided (a) indirectly, by such cultural elements as (1) the secret societies, (2) the social club of the Banks, (3) the patrilineal character of the culture of Mala and Ulawa; (b) directly, by traditions of immigration into Mala; (c) by the large number of Indonesian words in the languages, by grammatical similarities with Indonesia, and by the presence of Indonesian terms for the religious ideas of the peoples as well as for the relationship terms which are used.

Human Biology.

Evidence of Man's Kinship with the Primates. Discussion opened by Dr. Solly Zuckerman:

23 November, 1932.

Précis of Dr. S. Zuckerman's Opening Remarks. It is possible that some might understand from the title given to this afternoon's discussion that man is not one of the primates. I am sure that such an implication was far from the minds of those who arranged this meeting. All scientifically trained classification and phylogeny of this group of

persons who have examined any of the evidence agree that man is both an animal and a primate, and in opening this discussion I do not therefore propose to waste time considering the alreadyestablished morphological proofs of man's kinship with the other members of the Order primates, the monkeys and apes. What I propose to do instead is to consider facts from the fields of physiology and behaviour which bear on the question of the mammals, since this evidence is not as a rule treated in discussions such as that of this afternoon. Before doing so, however, I want to review the present position of our ideas on the classification of the primates, particularly of man, to see if current views on this question provide an efficient frame into which to fit the evidence presented by studies

of physiology and behaviour.

The individuals which make up an Order of animals must possess certain arbitrary characters which define the Order, and they are classified into Sub-orders, Families, Genera and Species according to the totality of the similarities and dissimilarities of the taxonomic characters they present for examination. Although these characters may become weighted after they have been systematically and rationally applied in classification, no special diagnostic virtue can be claimed on a priori grounds for any one of them. Classification forms the basis of phylogenetic speculation, and the more exactly it has been carried out (in other words, the greater the number of taxonomic characters that have been considered) the more likely will there be unanimity about the views which students hold regarding the evolution of the forms classified together. But since the rules of classification are largely arbitrary and empirical (especially in the creation of genera and species), ample scope is provided for phylogenetic argument. Moreover, the difficulty of tracing the details of phylogeny is greatly increased by the possibility that convergent or parallel evolution may have taken place among morphologically similar forms.

If the ideal were possible, our ideas on the evolution of the primates should emanate from a sound and unanimously accepted classification. Unfortunately, there is no such thing. The classical definition (laid down by St. George Mivart in 1873) of the characters which should be possessed by the members of the Order is regarded by many workers as unsatisfactory. Indeed, it is so wide that some authorities demand the exclusion of the Lemurs from the group, while others again suggest the inclusion of the Menotyphla. The classification is chaotic in another respect. Monkeys and apes are usually treated by zoologists, man by physical anthropologists. Each of these students has his own methods, and usually neither is fully aware of the other's activities. The physical anthropologist, with his studies mainly confined to the one family of Hominidae, probably regards the differences between the types he investigates as being far more significant than they might appear to the zoological systematist. The genera and species of the Hominida are thus not necessarily equivalent in their differentiation to those, for example, of the Family Cercopithecidæ (monkeys and baboons). But even within the Family Hominidae one meets serious inconsistencies in classification, since to-day we accept a scheme of classification in which interspecific differences, perhaps even the range of intra-specific variability, may be greater than

intergeneric differences. Such inconsistencies can be put down to a variety of reasons. Among them may be noticed the difficulties raised by anthropomorphic bias, and the fact that the first human remains which clearly did not belong to the species H. sapiens, were found and described at a time when human evolution was being hotly denied. There was no more logical basis for Professor King's creation in 1864 of a new species of Homo for the reception of the Neanderthal skull-cap, than there was for the creation of a new genus of Hominide. So far as he was concerned, it was largely an arbitrary choice.

When one studies on the one hand the differences between Modern man and Neanderthal man, and those between Sinanthropus and Pithecanthropus on the other, it soon becomes plain that the first two types are differentiated from each other at least as much as are the second two. This is not indicated by the present classification of Fossil men, which also fails to show that perhaps all archaic human skulls are more closely related to one another than they are to modern man. To classify some as species of Homo and others as separate genera is therefore irrational. True relationships would almost certainly be better expressed by definitely abandoning the existing classification, and by dividing the Family Hominidæ into two sub-families, the Palæanthropidæ, comprising such forms as Pekin and Neanderthal man, and the Neanthropidæ, consisting of types like Modern Man and men of the Upper Palæolithic.1 Having defined as exactly as possible the amount of differentiation necessary to establish generic or specific distinction among the Hominida, the known fossil human forms could then be arranged in these two sub-families.

The sub-division of the Primates into groups (e.g., Lemurs, New World Monkeys, Apes) is a matter depending primarily on a consideration of superficial factors like geographical distribution, external appearance, and teeth. Fundamental ideas as to relationships also emerge from this superficial classification, but detailed anatomical comparison is required to reveal the existence of more precise relationships. It is, however, doubtful whether such comparison could, with any scientific certainty, point to man's closest relative among the apes. The question may be examined from the physiological and psychological points of view. Definable characters from these fields of study can be used for taxonomic purposes side by side with those from the field of morphology.

Physiological characters (for example, the mechanisms of reproduction and the characters of the blood) and behaviour patterns (for instance, nursing behaviour) are differentiated among the primates in accordance with the sub-groups of the Order defined morphologically. Thus a typical menstrual cycle is characteristic of apparently only the Old World primates. Again, specifically the same iso-agglutinogens are found only in the anthropoid group, i.e., in man and the apes.

short, the study of the differentiation of physiological and behavioural characters helps to define the broader relationships of the primates,2 and from the point of view of this evidence there seems no reason to doubt that man evolved together with the apes

from a common stock.

The physiological evidence seems to suggest that man is more like the orang and gibbon than he is like the African apes, a conclusion contrary to the usual interpretation of the morphological evidence. The physiological data, however, also suggest that independent evolution of the same characters may have occurred in both the apes and man, and that there is accordingly no real ground from which to postulate relationship so close as this. Thus, so far as is known, the African apes possess only the isoagglutinogen A. The Eastern apes, like man, have both A and B. This implies that evolution with regard to the blood groups has been different, and very likely independent, in the African and Eastern apes-and if this is possible for this character, there is no reason for denying the possibility of the independent evolution of other characters. Thus, it is legitimate to doubt whether there can be a definite answer to a question asking which of the four existing apes is man's closest relative, even though there can be no doubt that man's evolution was closely bound up with that of the whole anthropoid group.

Discussion.—In the discussion which followed Dr. Zuckerman's paper, Professor Le Gros Clark said it was interesting to note how physiological, hæmatological and biochemical lines of inquiry corroborated in so remarkable a degree the conclusions which had been reached from straightforward anatomical observation. In those few cases in which there was an apparent discrepancy between anatomical and physiological evidence in regard to the degree of affinity with individual species of the higher primates, it remained a debatable point as to which should be given the greater weight. His impression was that physiological differences, implying as they seemed to do differences in fundamental metabolic processes, should make one very cautious in accepting anatomical similarities as evidence of a close relationship. The more detailed researches in comparative anatomy which had been carried out in recent years made it probable, in his view, that parallel evolution was quite a common phenomenon. Indeed, it was to be anticipated, as Osborn had emphasized, that the descendants of a common ancestor would tend to develop along parallel lines if they were subjected to similar types of environment, since they begin their evolutionary journey with similar potentialities. Consequently, structural similarities might denote nothing more than a descent from a common ancestor which may be quite remote.

Dr. G. M. Morant criticized remarks that had been made regarding classification within the Hominidae. He supposed that Dr. Zuckerman had implied that the classification of fossil human skeletons should be based on a comparison of their morphological characters only and without regard to any other considerations. This would be contrary to the practice of physical anthropologists, who have always attached great importance to the relative dating of the finds. He also disagreed with the suggestion that all characters should be given equal weight in classification. This has sometimes been done owing to the fact that there is as yet insufficient evidence to grade them in any exact way, but it appears obvious that greater importance should be attached to those characters which most clearly distinguish all human from all non-human forms.

Professor Elliot Smith, concluding the discussion, expressed the opinion that with the increase of our knowledge of the structure, development and functions of the various members of the Order primates both living and extinct, it is a matter of importance from time to time to examine the implications of our knowledge, new and old, and determine how far biologists are agreed and define precisely what are the legitimate differences of opinion, the settlement of which awaits further

investigation.

It must not be forgotten that when the classification of mammals was first made, a number of animals were grouped together as the Order primates mainly on the basis of their external characters, in particular, the possession of hands and pectoral mammary glands, and that this view was, in the main, subsequently corroborated (after certain errors were eliminated) and given a new precision by and embryological considerations. anatomical Within recent years the important evidence provided by the study of function has been introduced as a corrective and a corroboration. The suggestion made in the course of this discussion that when the morphological and physiological evidence appear to be in conflict, greater weight should be given to functional considerations cannot be admitted. The original distinction of the primates was the possession of hands, which represent morphological characters that are the expression of far-reaching physiological possibilities due to developments in brain and body which confer a distinctive position upon the primates. The morphological characters, in fact, are a concrete expression of physiological characters of such a high degree of complexity that only certain aspects are susceptible of experimental But the morphological expression of these physiological facts is patent to all. We would no more attribute to physiological resemblances the decisive weight claimed for them than we would call a butterfly a bird simply because it flies, when morphological considerations establish beyond any doubt the fact that a butterfly is not a bird.

Dr. Zuckerman has called attention to an important series of facts which, while revealing the intimacy of the connections of the different sub-orders of the primates establish quite clearly the facts that the Old World monkeys, the apes and man are much

² Zuckerman, S., 1933. 'A Study of the Bearings of Physiology and Behaviour on the Classification and Phylogeny of Lemurs, Monkeys, and Anthropoids.' Kegan Paul, London. In the Press.

more closely associated with one another than the other representatives of the Order are, and that the apes are more closely akin to the human family. Some of the functional characters that he makes use of are genetically linked with other primate characters which have been revealed by morphological and physiological tests. The interesting feature, for example, of increased mobility of the face and the use of the facial muscles for expressing emotional states which, as he has pointed out, distinguish the Simile from the Prosimiae, is clearly a direct result of the enhancement of visual discrimination resulting from the development of the macula which enables the monkeys to appreciate the subtle changes in the face which the lemur is quite incapable of recognizing. It is quite possible also that the differences in sexual behaviour in the animals with macular vision may also be due to the same cause, the dependence on visual knowledge for the stimulation of sexual interest. The recognition of this fact, however, would not at all diminish the importance of these distinctive characters. On the contrary, by emphasizing the complex and closely-knit pattern of behaviour which has resulted from a distinctive trend of evolution, it enhances the value of each of these different features as evidence of affinity.

The evidence submitted by Dr. Zuckerman leaves unsettled the problem as to the nearness of the relationship of the African and the non-African anthropoids to the human family, or rather, it presents the evidence in such a way as definitely to raise the possibility that the orang and gibbon may be more nearly akin to man than the chimpanzee and gorilla. On this particular issue it is essential not to ignore the evidence of morphology, whether of brain or teeth, muscles or viscera, and, in fact, the whole character and behaviour of the African apes which affords, in my opinion, unquestionable evidence of closer kinship

to man than the Asiatic apes do.

The interesting suggestion made by Dr. Zuckerman with reference to the re-grouping of the members of the Hominida is particularly valuable and, if adopted, it would, I think, remove a number of difficulties which present themselves in the present classification, especially when discoveries are made of new types of men akin to Neanderthal Man, but more primitive in type, such, for example, as Heidelberg Man, Rhodesian Man, and the newlydiscovered skulls in Java which Dr. Oppenoorth has called *Homo soloensis*. By suggesting that these different types of extinct men differ from one another less than any of them differs from *Homo sapiens*, the possibility is raised that it might be well to restrict the genus Homo to Homo sapiens and include it in a sub-family (Neoanthropidæ) distinct from all the other types which might be included in another sub-family (Palæanthropidæ). In that case, the sub-family Paleanthropide would include the genera Pithecanthropus, Sinanthropus, Eoanthropus and Palmanthropus, the last of which would include not only Heidelberg Msn, to which this term was originally applied by Bonarelli, but also Rhodesian Man, Neanderthal Man, Solo Man, as well as the Mousterian skulls recently found by Miss Garrod's expedition in Palestine, whose right to be included in the species neanderthalensis is still sub judice.

PROCEEDINGS OF SOCIETIES.

FOLKLORE SOCIETY.

Iconographical Peculiarities in English Mediæval Alabaster Carvings. Summary of a Com-munication by Dr. W. L. Hildburgh, M.A. 16 November, 1932.

After a brief account of the products of the English alabaster industry of about 1340-1540, and of the conditions in which it was carried on, the lecturer pointed out that the large number of English alabaster carvings still surviving supplies an exceptional amount of material for the study of mediæval English art. In them are displayed a considerable number of iconographical peculiarities some seemingly to be found in them alone, others seemingly only in contemporary English art in general, others occasionally (but rarely) also in contemporary Continental art—the determination of which has both scholastic interest and potential practical value, in art-historical, folklore, and general historical aspects, and for indicating the possibility of an English source for, or influence upon, objects in which those peculiarities occur. Some are in the treatment or the interpolation of details; others in composition. Some appear to have been misconceptions magnified through repetition; others

to have been based on incidents or properties of the popular stage; others on beliefs or on details of contemporary legends, current in England but not on the Continent, or the reverse. Amongst the matters discussed were the representing of Christ stepping on a soldier at His Rising, the showing of Him crucified upon the lily-plant of Annunciationscenes, the Virgin Mary's use of her rosary to weight the balance of St. Michael's weighing of souls, her bringing to life of the dead St. George, the so-called 'Trinity' with a group of souls and no Dove, the possible calendrical implications of the 'St. John's Head' tablets, and-in accordance with a considerable body of evidence, possibly ascribable to the attachment to St. James at Compostela of the concomitants of a Gallego-Roman 'Neptune' images of St. James with whelk-shells in addition to his usual scallop-shell.

Alchemy and Alchemists, Summary of a Communication by Professor John Read. M.A., Ph.D.: 30 November, 1932.

In a narrow sense, alchemy may be interpreted as the pretended art of transmuting the baser metals into silver and gold. In a wider sense it may be defined as the chemistry of the Middle Ages: according to Liebig, indeed, alchemy was never anything but chemistry. In its broadest aspect, it appears as a system of philosophy which claimed to penetrate the mystery of life and the formation of inanimate substances: it was thus a complex and indefinite blend of chemistry, astrology, philosophy, magic, mysticism, theosophy,

and other ingredients.

To the philosophic alchemists, the efforts made by the adepts to transmute metals were mainly of interest as attempts to prove the truth, on the material plane, of an all-embracing philosophic system. The despised 'puffers,' at the other end of the scale, were materially-minded seekers after gold. There were still others who interpreted the doctrines of alchemy in terms of mystical theology : thus, the celebrated Canon Ripley, of Bridlington, in the prologue to his 'Twelve Gates ' (1471), wrote : " O Unity in the substance, and Trinity in the "Godhead . . . as Thou didst make all things " out of one chaos, so let me be skilled to evolve " our microcosm out of one substance in its three aspects of Magnesia, Sulphur, and Mercury.

Heinrich Khunrath's quaint illustration of the Alchemic Citadel (1609), and Mylius' elaborate representation of the analogy of the Alchemic Microcosm to the Macrocosm (1620) are examples of alchemy in its broadest interpretation, as are also the numerous illustrations which were collated in the 'Viridarium Chymicum' in 1624 by Daniel Stolcius, a young Bohemian student. From such examples of its literature and iconography, alchemy appears as a jumble of natural and moral ideas, a confusion of objective facts and subjective notions, incorporating the fundamental principles of animism, and exhibiting ill-defined connections with the story of the Grail and other confused records of forms of worship, superstitions, occultism, and the like.

Among the reputed adepts none had a more circumstantial and romantic history than the Scottish alchemist, Alexander Seton, who has been termed 'the chief martyr of alchemy.' A century before his time, James IV of Scotland was interested

in alchemy as a means of gold-making and of healing disease. His chief alchemical assistant was John Damian, who was created Abbot of Tungland in Galloway, in 1504, "so that he might have more leisure to carry on his experiments." Details of the expenses incurred in these experiments, many of which were conducted in the Castle of Striveling (Stirling), are still extant and form very interesting The poet Dunbar said of Damian that " this Dignitary never chose to go to Mass though " warned by the holy Bell "-apparently because he feared the defiling effect of the laboratory smoke upon his costly religious vestments!

"This tyme," says an old record, "thair wes ane Italiane with the King, quha wes maid " Abbott of Tungland, and wes of curious ingyne. " He causet the King believe that he, be multiplyinge and utheris his inventions, wold make fine golde of uther mettall, quhilk science he callit the quintassence; quhairupon the King maid greit cost, bot all in vaine. This Abbott tuik in hand to flie with wingis, and to be in France befoir the saidis ambassadouris; and to that effect he causet mak ane pair of wingis of fedderis, quilkis beand fessinit apoun him, he flew of the castell wall of Striveling, bot shortlie he fell to the ground and brak his thee bane; bot the wyt theirof he asseryvit to that thair was sum hen fedderis in the wingis, quhilk yarnit and covet (yearned and coveted) the mydding and not the skyis."

In the concluding section of the paper, accounts of alchemical interiors and of typical alchemists were illustrated by lantern slides of engravings (mostly from the St. Andrews collection) after Teniers, Steen, Ostade, Wright, and other artists.

Collectanea,

The Editor of 'Folklore' (Revd. E. O. James, St. Thomas' Vicarage, Oxford) invites short contributions under the heading 'Collectanea, to supplement the longer papers communicated at meetings of the Folklore Society.

REVIEWS.

MYTHOLOGY.

The Mythology of all Races; Vol. V., Semitic. By S. H. Langdon. Archwological Institute of America. Marshall Jones, Boston. Humphrey

Milford: Oxford University Press.

Professor Langdon has given us a monumental The astonishing amount of labour and research which it implies can be appreciated only by those who have cultivated the same field of study, and it will be many years before it can be superseded in what constitutes the main and more For the book important part of the volume. forcibly illustrates how little we still know of what is strictly 'Semitic' mythology. The recent discoveries at Ras Shamra are just beginning to open up this side of the subject, but it will be some time yet before the results can be fully known.

As Professor Langdon remarks in his introduction.

it is as yet "impossible to utilize them."

Three-fourths of his book, consequently, is occupied with what he would term 'Sumero-Accadian,' that is to say, Sumero-Babylonian, mythology, a subject upon which he is one of our chief authorities. On the religious side he would associate the Babylonians with the Semites of Southern Arabia, among whom the Moon-god occupied the place taken by the Sun-god in North-Western Semitic theology. The subject is still a very obscure and complicated one. We are but just beginning to realize the important part played by the early non-Semitic populations of Mesopotamia in the thought and civilization of Babylonia, not to speak of the Asianic influence discoverable in myths like those attached to the cult of Tammuz.

Berossos tells us that Babylonia was originally inhabited by 'people of various nations' who derived the elements of their civilization from the Persian Gulf. The name 'Semitic' itself is difficult to define scientifically, since it is primarily philological and not ethnological in meaning. 'Semitic mythology' is in fact the mythology of those who spoke and wrote a Semitic language, but those who did so differed widely in race.

With the spread of Babylonian culture and script necessarily went the spread of Babylonian beliefs and religious legends in so far as they had assumed a literary form. Professor Langdon would refer most of these to a Sumerian origin like the civilization which they accompanied, and in many cases it is clear that he is right. The myths and beliefs were doubtless considerably influenced and modified by 'Semitic' scribes as time went on, but the core remained Sumerian.

A large number of the myths and mythological 'epics' like the epic of Gilgames have fortunately survived, more or less completely, and we are now able to compare in many cases the earlier and later editions of them. Of these, Professor Langdon has made full use, and in his plentiful translations, brought up to date, the reader will find not only a large amount of interesting literature but also a store-house of materials for further research. The texts are accompanied by a number of happily selected illustrations.

The author has divided his book, very appropriately, into the same number of chapters as the number of the signs of the zodiac. The first chapter is a general one on the 'Geographical and Linguistic Distribution of Semitic Races and Deities.' This is followed by one on the Sumero-Accadian Pantheon, succeeded by others on the Legend of Etana and his flight to the lower heavens on the back of an eagle, on the myth of the First Man, Adapa, on the Sumerian legends of Tagtug 'the 'Weaver' and Paradise, on the story, or rather stories, of the Deluge, on the epic of Gilgames, on the legends of the Destruction of Man in the pre-Diluvial age, on the epic of the Creation, on the Descent of Istar into Hades, and on Tammuz and Istar, the last chapter of the volume dealing with Devils, Demons, Good and Evil Spirits.' Cuneiform decipherment has indeed brought a new world to

One of the most interesting and unexpected discoveries of recent years is that of the ritual and its ceremonies celebrated annually at the beginning of the new year in Babylon and commemorating the death and resurrection of the God Merodach (pp. 318 sqq.). It is significant that the early name and title of Merodach himself was 'Asari 'who benefits man,' and that the name Asari (of unknown signification) is represented in the early script by the same hieroglyphs ('throne' and 'eye') as those which denote Osiris in the script of Egypt.

It is unfortunate that Professor Langdon has had to conform to the American custom of transferring what ought to be his foot-notes to the end of the volume. The custom may be convenient in what are termed popular books, but it is wholly unsuitable to a work intended for scholars. One result is to fill the text with a bewildering mass of unfamiliar names which should have been relegated to the foot of the page, the Sumerian theologians and their followers having been in the habit of identifying one with another the numberless deities with still more numberless titles who were worshipped in the various cities and districts of Babylonia and its neighbourhood. Naturally the argument in the text is often more or less obscured while time and patience are lost in looking up the references which the scholar expects to find on the same page.

It is needless to say that there are statements here and there on which there will be differences Personally, for example, I cannot of opinion, accept the Professor's dictum that 'every argument ' against' the identification of the Habiru of the cuneiform texts with the Biblical Hebrews 'has ' been specious and without conviction.' On the contrary, I agree with Dhorme in thinking that the theory is absolutely incompatible with both history and philology. We first hear of the Habiru or Habiri as mercenaries at Larsa in the time of Ammurapi, the Amraphel of Genesis, and later on we find them in Kirkuk eastward of the Tigris as well as in the Hittite capital in Asia Minor, where 1,200 of them formed the body-guard of the Hittite kings like the Tralleis of the Hellenistic age, and are consequently associated in the Hittite texts with the Lulakhu or Leleges of the Greeks. On the philological side the name is always written with initial Kh and so cannot be identified with the Biblical 'Hebrew' which is derived from the root signifying 'cross beyond,' the Assyro-Babylonian ebiru. The Biblical representative of Khabiru is 'Heber' the Kenite, not Eber, the inhabitant of the country which lay westward of the Euphrates. The book, it should be added, is A. H. SAYCE. provided with an excellent index.

AFRICA.

Pagan Tribes of the Nilotic Sudan. By C. G. and B. Z. Seligman. London, 1932. 9\(\frac{3}{2}\times 6\) in.

14 Pp. 565, folder map. Routledge, \(\frac{12}{2}\) 2s. 0d.

This handsome volume summarizes the results of three ethnographical tours in the Southern Sudan, many years' study of the literature, and endless correspondence and conversations with those who have served in various capacities in that vast region.

There is an introductory chapter dealing with the ethnology of the region as a whole, and with the distribution of certain culture features, particularly the ritual of rain-making. After this each tribe is dealt with under a series of headings—Regulation of public life—Kinship, family life and marriage—Religion—Rain-making—Death and funeral ceremonies, and the authors are to be heartily congratulated on the selection, arrangement and presentation of their material.

The longest chapters are devoted to the Shiluk, Dinkas, Bari, Lotuko and Nuba, of all of which the authors have considerable personal knowledge, and the Nuer and Azande, for which they rely largely on the writings, published and unpublished, of Professor Evans-Pritchard. In addition they tell us the little that is known of the other tribes, and of many of these,

particularly those on the eastern and western frontiers, extremely little is known. These short chapters are by no means the least valuable part of the book, for in these days of rapid change an indication of what is unknown may be even more important than an account of what is known.

It is curious to note that in one of these little-known tribes, the Uduk of the Abyssinian frontier, an elaborate couvade ritual is observed (p. 440), though the other

tribes have at most a few food taboos.

The authors for the most part repress the temptation to theorize, but there are minor lapses. The cult-hero Nyakang of the Shiluk, and the cult-hero Lerpio of the Bor Dinkas, both have shrines where the horns of sacrificed cattle are preserved; they are both regarded as ancestors; they are both prayed to for rain; they are both immanent in the divine ruler of the day. The two cults are, in fact, obviously analogous, yet the authors venture on the opinion that Nyakang was "an "historical ruler," (p. 76), but that Lerpio "was never "human" (p. 196).

Most English people believe without difficulty that the spirits of the dead can be at the same time in Heaven, in the grave, and on the back stairs, and this fact leaves the psychologists quite unmoved, yet a similar phenomenon in Central Africa calls for "an "explanation based on modern psychological ideas"

(p. 338).

The authors have adopted the ambiguous term 'bride-wealth' for bride-price, and this has led to further ambiguities, for, apparently to avoid the awkward phrase 'wealth is paid,' they have resorted to various paraphrases which suggest sometimes that cattle are exchanged, and at others that the system is one of voluntary gifts. These are, however, minor blemishes in a book which is full of information, and which is admirably written, illustrated and mapped. It is one of a series on the ethnology of Africa under the joint editorship of Messrs. Driberg and Schapera, and it is painful to think of the former's anguish when he read, on p. 514, that Zande parents "look upon their "daughter as a source of wealth," RAGLAN.

Hunger and Work in a Savage Tribe. By Audrey I. Richards, Ph.D. London, 1932. Demy 8vo., 4r Routledge & Sons. Price 10s. 6d.

Dr. Richards has earned the thanks of many by this book, not least of those whose views regarding early human life and behaviour come from experience and personal contacts rather than from theorizing. She will, as the years pass, earn also the thanks of all research workers among primitive peoples. They will be the more warmly welcomed in their allotted areas in future because of the proof here given of what can be achieved -even in a relatively short time-by one trained to detect significance in everyday acts. Research workers have not been, nor indeed are they at this moment, always warmly welcomed. 'Hunger and Work' should, however, contribute speedily to a change of attitude.

Thanks from those whose views are based on personal contacts with primitive communities, are due because of Dr. Richards' clear break-away from what Professor Malinowski in his preface describes as "exclusive, one-" sided and unsound interest in sex." For some of us this break-away has been long of coming, but it has come at last. Man, "with the incisors of a rodent, "the molars of a plant-eater, and the canines of a "carnivore," possesses institutions that centre around the biological need of food. He owns a nutritional system at least as complex and certainly as important as his reproductive system, and it is upon this fundamental thing that he builds his social life. In 'Hunger and Work, therefore, we are concerned not with the interesting side of early life—rites and ceremonies, magic and the 'unusual '-so much as with man's social ties and relationships, his co-operative activities and the human sentiments which underlie his institutions; all, in the last resort, founding upon the individual's alimentary needs as these have to be met in face of an inescapable alteration of physiological requirements in

succeeding periods from infancy to senility.

This book was written for presentation as thesis for the London Ph.D., but the material was not presented until Miss Richards' return from a year's field work among the Bemba in North-Eastern Rhodesia. book has greatly gained from this, but a word of caution may be useful lest these pages be ransacked by too hasty students who may not realize that 'A Savage ' Tribe' of the title is not simply the Bemba, but the savage tribe in general. There are, for instance, many long sections dealing wholly with South African Bantu of patrilineal and lobola type, the Bemba being matri-lineal and mainly agricultural. For the careful reader the point of passage from consideration of the one type to consideration of the other will never be anything but perfectly clear. Incautious plucking of material, however, from this chapter or from that, might lead to confusing results.

Dr. Richards' plea for the need of a more exacting type of field observation is timely; it is also wholly appropriate from one whose every chapter gives proof of meticulous care, both in observation and in the presentation of what has been observed. Her suggestions as to points on which the most careful research is yet needed are highly valuable. We must now await her return from the second visit to the Bemba upon which she has just embarked before we can get the full fruit of her training, her labour, and her obvious adequacy for just this special task which has come to her.

Of 'Hunger and Work' this further must be said: It contains a very useful bibliography, is efficiently indexed, and has been remarkably well read in proof, although one notices Bamba for Bemba in Professor Malinowski's valuable preface. The length of this review, conditioned by exigencies of space, is in inverse proportion to the value of a most notable book.

T. CULLEN YOUNG.

Notes on the History of the Tumbuka-Kamanga peoples. Notes on the Speech of the Tumbuka-Kamanga peoples. By the Rev. T. Cullen 16 Young. 2 vols, each 7½ × 5 in. pp. 192 and 181. London: Religious Tract Society. 1932. 6s. each.

An interest in their own past has sprung up among these people since our Fellow, Cullen Young, issued his book on their language and history in 1923. Some of them inundated him with additional information and others offered "serious and informed" criticism of what he had written. In consequence of this new material, he has been able to expand the one volume into two, and he is adding a third, which I have not yet seen, on their folklore and customs. As a result of the new enthusiasm he includes a number of clan histories penned by natives; and he provides lists of the class without, however, defining precisely what he means by 'clan.' Tradition, it is interesting to note, tells of a very ancient people "who dug in the ground" -they are named Katanga by some of the old men; and old diggings in the Nyika highlands testify to the presence of miners before the present inhabitants came on the scene. The traditional history of the Kamanga begins (about 1780 is Mr. Young's conjectured date) with the arrival of strangers who crossed from the east side of Lake Nyasa and whose leader came to bear the

name Mlowoka ('the crosser'). He is described as coming "as an Arab"; he was not an Arab, but evidently he had lived in close touch with Arabs or with Arabized folk on the eastern littoral of the continent. There is little doubt in Mr. Young's mind that these strangers came originally from the interior, possibly from the Luba country, before they descended to the east coast. It was from the grave of Mlowoka that the 'trident' came which was illustrated and described by Mr. Young in Man, 1929, 147; a similar specimen has since been discovered near Mkushi in Northern Rhodesia and Mr. T. A. Joyce tells him that another, not identical, has reached the British Museum from the Gulf of Guinea. This object, so utterly different from anything that the Nyasa peoples make, naturally excites Mr. Young's curiosity. Where did it come from? The Nkonde (or Ngonde), who live to the north of the Kamanga, state that their fathers migrated from the country of the river Kyari, and Mr. Young says there is ground for identifying the Kyari with the Chari which flows into Lake Chad. The Nkonde are very unlike the Kamanga, but their tradition is to the effect that Chungu, whose name is borne hereditarily by their paramount chief, was a member of Miowoka's party. Mr. Young asks, "What is the "historical connection between the Ngonde people under "Chungu and the trident of chieftainship found on "graves at Nkamanga and Mkushi?" We cannot answer that question, but we should like to know the grounds for believing that Kyari and Chari are identical, If a connection could be shown to have existed between the Bushongo and the Mlowoka party we might admit the possibility that some of the latter had come down with the former from the far north. Be this as it may, it would seem that the arrival of Mlowoka marked the beginning of the penetration of the interior from the east coast. It was a commercial adventure; the strangers brought with them cloth and beads and bartered these for ivory—the slave-trade was a later development. Mlowoka travelled widely among the Tumbuka, who at that time lived in simple village communities acknowledging no tribal chief. In the course of years he (or his successor) was recognized as the centre of authority over a wide area, and he estab-lished a dynasty, with the title of Chikuramayembe, which, although temporarily broken up by the Ngoni, still holds its position and is now recognized by the British Government. This is an excellent example of the development of African social organization under the stimulus of foreigners. Not the least valuable part of the history is that which describes the arrival of the Ngoni from South Africa. Mr. Young has taken pains to map their onward march and to calculate dates from the day they crossed the Zambezi on November 20th, 1835-the date is fixed by an eclipse of the sun. In a note on the name, Mr. Young says that Ngoni seems to mean both 'wanderer' and 'raider,' but a reference to Mr. Soga's book on the South-eastern Bantu would have shown him that it was the old name of the Ama-Xosa, some of whom had remained in Natal whence they migrated to the north, and was not invented later for the wandering raiders. We hope that other residents in Africa will follow Mr. Young's example and record the native traditions while they are still extant, for, while such books contain much indigestible matter, they are capable of assisting in tracing tribal movements

and, incidentally, illustrate customs.

What Mr. Young modestly calls "Notes on the Speech" is a careful and useful piece of work. He adopts an order that is unusual in grammars, but it is convenient if not scientific. One is particularly pleased with the way in which he treats idiom in the chapter

on "some colloquial expressions." As he well says:

"A knowledge of the formal language of a people is
"one thing, familiarity with their everyday speech is
"quite another." He follows the old orthography
which has many faults: his Mission Council, it appears,
"has as yet felt no need to alter the existing symbols
"or to add thereto." We have no space to comment
on the many interesting features of the Tumbuka
language. One criticism may be suggested. In the
Chi-Vi- class he includes nouns formed on the model of
chakuvunira, in which the verb retains its final a and
the sign of the infinitive, ku. He does not note that
the prefix cha is really the possessive concord of this
class, not the classifier; so that the verb comes to
mean '(a thing) of (or for) reaping with.' It is interesting to note the existence of a Ka-Ma- class, comprising nouns which denote mode or habit—the ka
figures in some other Bantu languages as an adverbial
particle or preposition.

Cattle Thief: the Story of Ntsukumbini. By

Frank Brownlee. 8'× 5 in. Pp. 247. London:
Cape. 1932. Price 4s. 6d.

Our formal treatises describe the bare bones of African life; one is glad to get hold of a book which clothes the skeleton with flesh and blood. Mr. Brownlee here sets down the talk of an old Xesibe tribesman of the Transkei who related to him many of the incidents of his career. He was a humorous old rascal. His experiences make good reading and incidentally throw much light upon Xosa customs. The beautiful lovesong in Xosa and English on pp. 178-9 is worth noting. It should be said that this is a reprint of the edition first published in 1929 under the title Ntukumbini. E. W. S.

18 Paper, 10 × 6½ in., pp. 304. Plates and maps.
Paris: Societe d'éditions géographiques. Published under the auspices of the International Institute of African Languages and Cultures. 1932.
In this book M. Monteil provides an excellent study

of the famous city of Djenne which has played a great part in the history of the Western Sudan for some hundreds of years. It stands in the so-called Central Delta of the Niger, where the French hope to develop an irrigation scheme that will rival the Gezira. Beginning with a careful description of the surroundings the author reviews the history, relying in the main upon Es Sadi's 'Tarikh es Sudan.' Industries and Commerce are dealt with fully in the final chapters, and the middle section is devoted to the inhabitants, The Fula are in the who number about 83,000. majority. The earliest denizens of the district appear to be the Bozo, who now live almost exclusively by The earliest denizens of the district appear fishing. The first invaders were the Nono, a mixed people partly of Berber origin. They founded the city. The Bambara living in the district number about 20,000—next to the Fula they are the most numerous. M. Monteil says they believe in un maitre de l'univers, but the belief has borrowed precision from Islam and now they name God Ngala, qui n'est q'une deformation d'Allah. It would seem that they retain their old animistic beliefs. Besides the cult of the dead there is a cult of nyana duguda siri, a genius loci, master of the soil, who resides usually in a tree in the village. More important appears to be the cult of Nya who is one of the nyana that is embodied in a boli, an image or other material object. This cult is described at length. Sociologically it is important because the disciples of sociologically it is important entrance into which is through a ceremony which symbolizes birth. Apparently

these divinities were never human beings, but on this point M. Monteil is not clear. Nor is he sufficiently clear in his description of the soli initiation ceremony. At first it appears that this forms the entry into the Nya brotherhood, but afterwards it seems that all the boys and girls pass through the rites as an initiation into the tribe. M. Monteil agrees with some other observers about the effect of Islam upon the negroes of the Sudan. It is through the Musulmans that commerce, industry and agriculture have received a now impulse: the negro has been fortified by what he has taken from them. But M. Monteil warns us not to be deceived by the formation of an dite. Islam, far from having triumphed, has been vanquished by being sudanized: c'est cette défaite qui lui vaut, au Soudan, sa persistance parce qu'il s'est incorporée au milieu indigène. E. W. S.

Les Tribus du Rameau Lobi. Par Henri Labouret, Professeur à l'École Nationale des Langues Orientales Vivantes et à l'École Coloniale. (Travaux et 19 Mémoires de l'Institut d'Ethnologie, XV.). 10½ × 7. Pp. vii + 510. Illust. Paris: Institut d'Ethnologie, 191, rue Saint-Jacques. Price 125 fr. France and French

Colonies, 150 fr. elsewhere. 1931.

The Lobi group of tribes is found on the right bank of the Upper Volta, in the Gaoua district of the Ivory Coast. They include the Birifor, Dian, Dorossié, Gan and Téguessié, as well as the Lobi proper. In the absence of a phonetic transcription, the French spelling has been retained. These six would appear to have a common origin, though at present the necessary evidence is lacking. Their languages also (though this may not prove anything as regards race) are closely allied. They appear to have migrated from the left bank of the Volta about 150 years ago. The Dorossié and the Gan, who live in the most westerly part of the district, are generally agreed to have been the earliest comers; but the Téguessié in the south (also living dispersed in small groups among the Lobi and the Birifor) are considered by the other tribes to be the real owners of the soil and the waters. These last are, or were till recently, under the guardianship of a certain aged woman, who performed the obligatory sacrifices, without which no one was allowed to fish in the rivers. The most usual method of fishing is by poisoning the water with the juice of Tephrosia vogelii, with the use of which various tabus are connected.

The Lobi, though they originally settled in uninhabited country to the south of the Téguessié, now occupy, more or less, the centre of the district, having the Birifo on the east and the Gan on the west. On their first coming they found themselves neighboured by the Koulango, still living near Bouna in the south, though they claim a kind of sovereignty over the whole country as far as Diébougou. It would seem as if the chief of Bouna possessed some religious authority, similar to that of the Tendaga among the northern Gold Coast tribes. It is these Koulango who are believed to have built the stone dwellings, the ruins of which are scattered over the greater part of the Gaoua district, frequently associated with the circular shafts dug through the local laterite for their gold-workings. The region is rich in gold, but the Lobi and others who succeeded the Koulango have contented themselves with surface washings, an industry confined to the women.

The social organization of the Lobi is extremely loose—so much so that, on a superficial view, one might be tempted to declare it non-existent. There are no chiefs and, strictly speaking, no villages: single homesteads are scattered along the slopes of the hills, on sites determined on the one hand by access to water, on the other by safety from the frequent floods of the

rainy season. The current definition of the word 'tribe' does not apply to them, since "on ne leur "connaît ni organisation, ni conseil quelconque, ni "chef suprême; ils n'ont ni la conscience des intérêts communs à chacun d'eux ni le sens de la solidarité. "Ils se sont révélés jusqu'ici incapables de se réunir "pour entreprendre une action concertée, même temporraire. . . . Quoi qu'il en soit, le terme de tribu "peut s'appliquer, semble-t-il, aux fractions étudiées "ici: Birifor, Dian, Dorossié, Gan, Lobi et Téguessié, "parce qu'elles constituent, en effet, des groupes "particuliers, dont chacun est formé de plusieurs clans ou sous-clans, parlant un dialecte commun et habitant un territoire déterminé."

Each of the six tribes here mentioned (with the possible exception of the Téguessié) comprises four clans. The names of these are the same for the Birifor and the Lobi, and there are partial correspondences among the other names. Each clan is divided into exogamous moieties, but the clan as such is not exogamous. There are traces of clan tabus, which may or may not be connected with totemism, but these appear to be falling into disuse.

The section "Réligion et Magie" is perhaps the most interesting of an extremely valuable book. I can here only call attention to the Dyoro society, with its rites of river-worship and its initiation ceremonies in which the bull-roarer (Nab or Na-see Plate XVII, 8) figures, and the notion of Kele (nyama of the Mandingo). This can searcely be equated with mana, since its action is invariably harmful. So is "un fluide nocif, susceptible "de causer de graves maladies" and emitted by the bodies of certain "petits dieux à grosse tête, à cheveux "longs, et au corps tellement couvert de poils roux "qu'on ne voit pas leur peau." These pixies, can scarcely be equated with mana, since its action is who may correspond, more or less, to the Itowo of Nyasaland, the Tulalamadindi of the Subiya, or the Wakonyingo of Kilimanjaro-though none of these are reputed to possess this peculiar effluvium-" vivent en famille dans la brousse, cultivent la terre à leur "manière et possèdant des troupeaux "—consisting of the wild creatures of the forest. They might con-ceivably be the ghosts of an actual pygmy tribe. Kcle may be incurred by killing a lion, one of the large antelopes, the crowned crane, the hornbill, or a man. In every case purification rites are necessary, comparable to the ukuqunga of the Zulus.

M. Labouret's long residence among the people described, during which he so far gained their confidence that he was welcomed as a spectator of their religious ceremonies, and his knowledge of Lobi and the kindred dialects are sufficient guarantees for the accuracy of the information here conveyed.

A. WERNER.

Proverbes et Maximes Peuls et Toucouleurs; traduits, expliqués et annotés. Par Henri Gaden, Ancien Gouverneur des Colonies. (Being Vol. XVI of Travaux et Mémoires de l'Institut d'Ethnologie.) $10\frac{1}{2} \times 7$. Pp. xxxiii + 368. Paris Institut d'Ethnologie, 191, rue Saint-Jacques, 1931. Price: France and French Colonies, 37 fr. 50; other countries, 56 fr. 25.

M. Gaden's reputation as an expert on the extremely interesting but till recently little known language of the Fulbe (Poul) is so well established that there is no need to insist on it. He has now added to the already published results of his studies, a valuable collection of proverbs and sayings, running to 1,282 numbers. These have mostly been gathered at first hand from native informants and all carefully checked. The explanations appended were supplied by the best native authorities, one of whom, it may be noted, was

introduced to M. Gaden by a grandson of the celebrated Haj Umar. The introduction to the main body of the work includes (pp. ix-xxxiii) an important study of the Fulfulde verb, completing and, in some respects, modifying that already given in the author's former book,

Le Poular' (1912-14).

Besides the explanations referred to above, some of the proverbs give occasion for more extended notes, e.g., pp. 17-20, on terms of relationship, pp. 23-26 on marriage customs, p. 73 (the hyena), pp. 110-113 (magic), p. 254 (divination) and many others. A curious belief is that which has suggested the proverb Tîna déyâka yimbe, 'a tina sheep belongs to nobody.' Sheep of this kind (brown, with a lighter stripe on the side) are reputed so unlucky that none are ever seen in the Toucouleur country: a lamb of this colour would be killed at birth, and no one would dream of buying a tina. It is endued with some influence known as kite, which has much the same effect as the evil eye.

A few of the proverbs may be given as specimens: Spilt water is better than a broken vessel.

Even if the child has grown a tail, his father

will certainly hide it.

That which has eaten up the hoe and the axe will not leave roasted ground-nuts and salt. people who are disrespectful to those nearest them, will not respect their superiors.)

If the rat has put on trousers, the cats will take

them off him.

Buying is more lawful, but robbery is more speedy.

The hyena will cat anything that is dead; but when she is dead there is nothing that will eat her.

God knows what he gets who skins a mosquito, but what about him who waits to get a share of

He milked into a (perforated) pot for steaming couscous, and then he poured the milk into a basket.

(Said of an extravagant person.) The paralytic cannot march with the enemy it is true; but he can say 'May Allah destroy the

enemy!

A foot on the ground, a serpent on the groundif they have not met this year, they will meet next year. (Accidents are sure to happen some time or

The word here used for 'serpent,' "boddi, properly means 'thing forbidden, tabu.' There is no generic name for 'serpent,' though each species has its own name.

On p. 74 is an incantation to be uttered on meeting a hyena, warranted to render the beast inoffensive, and on p. 209 one for securing the cattle-kraal against wild

The information contained in the final chapter, on the inhabitants of Fouta Sénegalais and their customs, A. W. should by no means be passed over.

ECONOMICS.

Economics in Primitive Communities. By Richard Thurnwald. Oxford University Press. 15s. (Published by the International Institute of African Languages and Cultures.) Pp. ziv, 304. In this book Professor Thurnwald discusses the evolution of economic organization from the most primitive

cultures to the relatively complex societies of Egypt, Sumeria, Greece and Rome. His main thesis is the close interconnection in any culture between economic and political organization; in fact, he finds the origin of all political developments in the adaptation of society to economic innovations. He classifies his societies according to the type of economic life and relates this in each case with its appropriate form of government, then

proceeds to discuss various special problems of economic organization, such as property, distribution and exchange, symbols of value and money, partnership and collec-tivism, as they present themselves in different types of society. Unfortunately, he has found it necessary severely to compress his theoretical argument in order to introduce a mass of data whose relevance to the particular point under discussion is not always clear. Consequently we are left without any clue as to the way in which we are expected to envisage the processes of development which he takes for granted—the substitution of the family for the clan as the essential economic unit, for example, or the series of unfair exchanges between pastoral and agricultural communities which eventually leads to the domination of the herdsmen (wars of conquest being unknown among primitive peoples and therefore inacceptable as an explanation of ethnically stratified' societies), or the final 'with-drawal into the priestly orders' of the pastoral clans.

Though Professor Thurnwald is so far in agreement with the functional theory of anthropology as to reiterate from time to time that all aspects of culture must be regarded as interdependent, he scarcely puts the maxim into practice; indeed, it is hardly possible consistently to do so and adhere to the position that the development of economic skill alone determines every other element in a culture. Thus, in the case just quoted, he treats religion as if it existed for no other reason than to provide a livelihood for superfluous herdsmen in an increasingly agricultural society. Even more remarkable is his attitude towards women, whom he almost invariably classifies with commodities. "Wives are the oldest form " of profitable capital," he writes on p. 180, while in his chapter on 'Collectivism' he inserts two sentences on the custom of wife-lending which do not suggest that it differs in any way from the communal ownership of land to which the rest of the chapter is devoted.

It is particularly unfortunate in a work devoted to a subject in which accurate analysis is so important to find so little precision in the use of technical terms. Such words as 'wealth,' 'money,' 'profit,' even 'work,' are used sometimes to convey a special meaning peculiar to the author and sometimes so vaguely as to convey no meaning at all. Such a defect is the more regrettable in a book which contains many original and suggestive ideas. One could wish that the author had dispensed more clearly formulated and reasoned theory.

L. P. MAIR. with some of his detailed evidence and instead given us a

LINGUISTICS.

Grammaire et Dictionnaire de la Langue des Iles Marquises. Marquisien-Français. Par Mgr. Réné Ildefonse Dordillon. (Being Vol. XVII of

Travaux et Mémoires de l'Institut d'Ethnologie.)
Paris. Institut d'Ethnologie, 1931. Pp. 446.

This volume is mainly a reprint of the Grammar and Dictionary published by Mgr. R. I. Dordillon in 1904. The grammar has been considerably enlarged by the inclusion of many additional illustrations of rules and syntax, but the arrangement and text closely follow the earlier work. In the dictionary the definitions are re-arranged, homophonous words being separately entered when their significations differ. A large number of illustrative phrases have been added to the definitions. On the other hand, however, some words which were contained in the earlier edition have been omitted.

The book will be valuable as a record of one of the most distinctive languages of Polynesia. For practical use by the European it will be less useful than the first edition, owing to the want of a French-Marquesan index, and its inconvenient size.

A Dictionary of English-Palaung and Palaung-English. By Mrs. Leslie Milne. Rangoon, Supdt. Govt. Printing and Stationery, Burma, 1931. 7½ × 5 in. 1 Vol. Pp. x + 383, v + 290. Price Rs. 15 or 22s. 6d.

By the publication of two earlier works, 'An Elementary Palaung Grammar' (1921) and 'The Home of an Eastern Clan' (1924), Mrs. Milne had already contributed more to our knowledge of this small nation than all the previous authorities put together. She has now fittingly completed her self-imposed task by producing the first dictionary of the Palaung language, containing several thousand words and likely to remain for many years the standard work on the subject. It is in the main a record of the dialect of the Palaungs of Namhs'an, the capital of the State of Tawngpeng, one of the Northern Shan States, which is inhabited almost entirely by Palaungs; but it also includes an appendix giving many variants in a number of other dialects. The author was not a passing traveller, but lived in close contact with the people for long periods, during which she devoted practically all her time to an intensive study of their customs and language. As the Palaungs have not committed their speech to writing, it is obvious that all this must have involved a very great amount of careful labour.

It is impossible for anyone who does not himself know the language to appraise a dictionary adequately. most that can be said here is that this one has all the appearance of being an excellent piece of work. It is relatively copious, the transcription used represents a long list of the sounds of the language (which has a fairly complex phonetic system), and the work is no mere word-list, but contains many phrases and sentences illustrating how some of the words are used. It is, therefore, useful from a practical point of view, as well as being a record for students of linguistics. The language is an interesting member of a family which also includes Mon and Khmer, besides many other languages, but it has borrowed a considerable number of words from Shan and Burmese. One reason, perhaps, why no full account of it had previously been made is that all Palaung men are more or less familiar with Shan, and British officials have been in the habit of dealing with them in that language. There are, however, obvious advantages in being able to converse with these people in their own native tongue, and Mrs. Milne has now provided the means thereto in sufficient measure. The next step should be for someone to collect texts. i.e., conversations and stories, and get them published in due course.

It is gratifying that the value of Mrs. Milne's dictionary has been duly recognized by the Government of Burma, under whose auspices it has been printed and published in a handy and portable form very suitable for all purposes.

C. O. BLAGDEN.

CENTRAL ASIA: EXPLORATION.

Rätsel der Gobi. By Sven Hedin. 9 × 6 in. Pp. ix + 335, 74 illustrations, 2 maps. Leipzig, F. A. Brockhaus, 1931.

This volume, a continuation of the same author's 'Auf grosser Fahrt,' consists for the most part of reports on the various sectional expeditions of which he was the head organizer. These were carried out by experts of several European nationalities, as well as some Chinese, who devoted themselves to a variety of tasks connected with the exploration of Central Asia. Topography, climate and meteorology, geology, paleontology, archaeology and prehistories, zoology, botany, native habits, arts and products, were among the subjects which they studied, and the accounts of their travels and adventures (some of which were highly dangerous) make very interesting reading. In spite of the obstructiveness of certain Chinese officials, much good research work was done, the full details of which await the appearance of subsequent publications.

The photographic illustrations are excellent, and the two maps are useful, though their scale is inevitably small for the large area covered by these travels.

Not the least interesting part of the book is the first chapter, which sketches the history of Central Asian exploration. Like the scorpion, it has a sting in its tail, viz., the statement that English explorers usually omit from their writings all mention of their foreign precursors. I think this may be charitably ascribed to our national ignorance of foreign languages and literatures; but for neglect of the book under review no such excuse will hold good, for it has, I understand, appeared in an English translation.

C. O. BLAGDEN.

CORRESPONDENCE.

Eye-gouging.

Snt,—When Dr. E. H. Hunt in the course of his absorbing lecture (MAN, 1932, 51) threw on the screen the picture of a Rafai Fakir of Hyderabad with eye completely out of the socket I was irresistibly reminded of a Sinhalese demon mask.

Such masks are to be seen in the British Museum, and are illustrated by Dr. O. Pertold in Archiv Orientalni

II, plates xxvi ff.

Reasons were adduced at the leature for believing that eye-gouging in eestatic dances was once more widely spread than it is now. The Sinhalese masks seem to preserve memories of a practice now extinct (so far as I know) in Ceylon.

The Sinhalese masks represent yakshas, demons impersonated by the dancer. These yakshas are connected with dolmens (Ceylon Journ. of Science, G, II, 95), and

so may be neolithic.

Eventually the most fantastic motives in art will be traceable to simple reality. The study of living customs must be the key to archæological remains. A. M. HOCART. Theology and Physical Paternity.

SIR,—In his letter under the above heading (Man, 1932, 218) Mr. Perry advances an ingenious argument to account for the divine potter's part in the birth of ancient Egyptian sovereigns from the 5th Dynasty on.

The Egyptian king, he says, both alive as Horus and dead as Osiris, was the source of life, and was compared by the theologians of Heliopolis with the Sun. They next put the Sun on an equal footing with Osiris and so made him father of the king. Here Mr. Perry seems implicitly to assume that Horus, the somewhat colourless son of Osiris, is the Horus, 'totem' of the Royal House, one of the oldest gods and clearly distinct from Harpocrates in the Pyramid Texts of the period under discussion. He seems to suggest that he was promoted to identification with Osiris, whereas the opposite is rather the case. He goes on: there being no personal Sun-god he could not be father of the king, so Khnum the potter was introduced to make him. Now there is no evidence that Re was not a god prior to the period of the written texts (many of

which are far older than the period of their inscription) in which Re-Atum is the supreme god. Re occurs in a royal-name and a place-name in the 3rd and 2nd Dynasties respectively. Mr. Perry would hardly suggest that the Texts were the product of the brains of the priests of one age and that the age he is considering? Professor Breasted (A History of Egypt, p. 122) evidently sees no need for theological subtleties to explain the origin of the Dynasty of the Sons of the Sun.

The State theologians, he says, had always represented the king as successor of the Sun-god from the beginning, but the priests of Heliopolis now decided that he was the bodily Son of Re, who would henceforth appear on earth to become the Father of the King: they had succeeded in organizing their political influence and

overthrowing the old line.

As for the Divine Potter, do not wives to-day even in England, fully aware of the physiological exigencies,

pray to Him for offspring?

Amon-Re in pre-Athanasian days did not pray—he commanded, and Hatshepsut was fashioned according to specification. There is nothing fantastic in the idea, the symbolism, or the action of the Supreme God, whose powers were delegated in many directions.

E. S. THOMAS.

Papua: Physical Paternity (MAN, 1932, 66).

27 Sir.—In view of the controversy taking place with regard to the knowledge of paternity in Papua, the following may be of interest:—

About 1910, when I was Resident Magistrate for the North Eastern Division, I recruited, as a native armed constable, a native of Yuaiyu, a Maisin village in Collingwood Bay. For some five months he was everything one could desire and showed every sign of becoming a first-class constable. At the end of five months he came and explained that the Yuaiyu people had been committing adultery with his wife, his reason being that his wife had just given birth to a child, he having been away from his village for five months. I refused to take any action, and did my best to explain to him that the facts indicated that he was the father of the child. But he refused to accept my view of the matter, and got so discontented at my not putting someone in gaol for the supposed offence that he became useless as a policeman, and I think spent much of his time brooding over his supposed wrongs. Finally I arranged that he should be discharged from the force. If I had not been able to see the matter from his point of view he would probably have been sent to gaol first. I imagine he had learnt from Europeans (who have been more or less in contact with the natives of Collingwood Bay for some twenty years) something of European views of conception without getting the full facts.

I also remember a very interesting remark made to me by Capt. Barton many years ago. He related that one day he had come to a village high up in the Main Range. Like all other officers he doubtless asked questions about the country and villages farther on. He was told that there was a village in which were nothing but women. He said that was impossible for the village would soon die out as they could have no children without men. The curious reply was given: 'Oh, perhaps they open the way with stones.' As the natives were then in a purely neolithic stage, I think we can infer what was meant, namely, that the way for an embryo to enter could be made by more than one thing. I do not know whether or no Capt. Barton has

ever published this.

Papuan men very generally have great affection for the children they own. But they are often very indifferent about the family into which they were actually born. [Dr. Strong here gives some examples of adoption.]
It seems to me that the primitive Papuan point of view is that he owns both his wife and his child, and that such leads him to regard them with affection and

There is another aspect of the controversy of a more general nature to which I wish to refer. Anthropologists not infrequently say that the natives of some place think something or do something when they really mean that the primitive natives untouched by European influence think this something or do this something. suppose anyone with anthropological training and experience knows what is meant, but a layman is very liable to take the statement at its face value and to ridicule the idea that the native, whom he may perhaps know quite well, does or thinks anything quite so foolish. It is incredible that the present day Trobriand Islanders do not know something of physical paternity. For about a quarter of a century they have had a resident missionary as well as a resident government officer and numerous pearl seekers. One government officer had had a medical training. It is incredible that these have not on more than one occasion explained something of physical paternity to the natives at times, perhaps in a very crude way. It is also incredible that European ideas have not appreciably permeated the minds of the natives. There may be a few hoary old conservatives who reject the newfangled ideas altogether, but others, especially those who have grown up under direct mission influence, may know little or nothing of the old ideas as to paternity. The majority probably join the old and the new together in some more or less logical or illogical manner, and would lay a different degree of emphasis on the new and the old according as to whether they are giving evidence in court, being cross-questioned by a missionary, or excited by a native dance or ceremony, or talking to an anthropologist about old times. In some cases perhaps the native may think he is showing his superiority by knowing nothing about the old ideas which all Europeans will tell him are foolish

Perhaps in conclusion I should say that I know little or nothing about the Trobriand Islanders first hand. I have lived in Papua for something over the quarter century as Resident Magistrate, anthropologist, and medical officer of the Papuan Government.

W. M. STRONG.

The Sculptor's Cave, Covesea, N.B.

28 Sir,—May I trouble you with a tale of a hotwater bottle. Some of it is current already, and I should like to complete it.

In July, 1931, I watched certain slabs of clay cut out of the Sculptor's Cave, Covesea, and set on a barrow. Presently, I proceeded to the mouth of the cave and

saw the foreman, who was detailed to examine the clay, standing over the barrow wiping an object.

In the course of time I submitted the object to the Antiquaries of Scotland, when a Fellow of the Society told me that it was the top of a hot-water bottle. I retorted with some heat that this was impossible, as it was found in or below a pure early deposit. Later my conscience pricked me and, being in Elgin, I said to the foreman, 'I suppose that object did come out of the 'barrow?' 'Na! Na!' he said, 'I dinna mind far '(where) I got yon, but it wisna frae the barrow.' It is regrettable that that question was not asked before I showed the Society a hot-water bottle.

Nevertheless, I do, personally, still believe in the stratification. The deductions therefrom will be checked by evidence elsewhere, and I believe some is already available.

SYLVIA BENTON.



Figs. 1 and 2.—POTTERY HEAD AND BODY FROM PIT AT LUZIRA.



Figs. 3 and 4.—Pottery objects, probably amulets, from shrine at luzira.

POTTERY OBJECTS FROM LUZIRA, UGANDA.

(Scale in inches)

M A N

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FEBRUARY, 1933.

ORIGINAL ARTICLES.

With Plate B.

Uganda: Archæology.

Wayland, Burkitt and Braunholtz.

Archæological Discoveries at Luzira. By E. J. Wayland, M. C. Burkitt, and H. J. Braunholtz.

Description of site.—About three years ago when part of the top of Luzira hill, near Port Bell (Uganda) on Lake Victoria, was being removed during building operations in connection with the prison, consternation was occasioned among the prisoners when felling a large chunk of earth from the face of the low artificial cliff, because of the uncovering of what appeared to be a human face. On examination by a European police officer, this remarkable find proved to be a head of a pottery figure and continued excavation revealed fragments of other figures (Pl. B, Figs. 1 and 2). Further digging was then stopped till the present writer had examined the site.

The section exposed (Text Fig. 5) was as follows :-

- 4. Soil; 1 to 2 feet.
- 3. Red earth; 4 to 8 feet.
- Angular quartz rubble—about one foot, but varying in thickness from place to place: here and there it was less than 1 inch thick, but hardly anywhere was it entirely absent.
- 1. Rotted granite: unknown depth.

The granite needs no further description. The rubble consisted almost entirely of quartz fragments derived from veins in the granite; it was quite unwaterworn and very angular. It was found to contain artifacts belonging to two groups; the one contemporaneous, the other derived. The latter was represented in the small collection made by the writer at the time, by a coup-de-poing of Acheulean

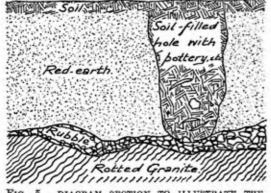


Fig. 5. Diagram section to illustrate the occurrence of pottery-containing and soil-filled holes at luzira.

affinities (Text Fig. 7A). It is somewhat patinated. The former is of less ancient facies. These are described below by Mr. M. C. Burkitt.

The red earth was proved by Dr. Groves, of the Geological Survey, to be mostly drifted material, and may well have been aeolian in origin. The soil was dark coloured, but needs no further description here. Intruding downwards from the surface into the red earth, and in one case into the rubble, were what appeared to be a few elongated continuations of the soil, recalling to some extent, grave pipes in the chalk. It was in one of these that the pottery head was found (Pl. B, Figs, 1 and 2).

These appearances suggested sections of graves; and the writer superintended excavations in order to recover what relics they might contain. It was found, however, that in horizontal section the supposed graves were approximately circular and no trace of a burial was found. Clearly, the

occurrences were not graves at all but holes, or shallow pits, into which rubbish had at one time been thrown or buried. Many fragments of pottery were recovered, and it was clear that the vessels had been broken before they were cast into the holes. Not a single whole pot was found, and the same remark applies to the pottery figures. The fragments were scattered indiscriminately throughout the soil which filled these holes; and it should be remarked that in relation to the soil present the pottery remains were few and far between. Only three of these pits were exposed, and all were carefully excavated. Only one very small piece of bone (completely rotten and of no interest) was discovered. The entire collection of remains was sent to the British Museum¹: a description of them by Mr. H. J. Braunholtz will be found below.

On the hill-top, about a quarter of a mile from the one-time pits described above, was a shrine which was still in use, or had been very recently, when the writer was there. It consisted of a four-legged pot containing dirt, rainwater, and some coins,² while scattered around it in crude arrangement were a number of spear heads and other objects. The spearheads were, most of



FIG. 6. THE SHRINE AT LUZIRA.

them, oriented so as to point inward, as seen in Text Fig. 6. Some of them were tanged, which is not the case with modern spears in Uganda; some socketed examples had a hole below the blade, and cannot be matched, so far as the writer knows, within the Protectorate; and there were, among other things, some highly peculiar pottery objects, some of which roughly resemble pestles; others are more or less lunate, and some are ring-like (Pl. B, Figs. 3 and 4). All were made from a clay, derived, perhaps, from the local granite, packed with rather large flakes of white mica (muscovite). It is not improbable that the clay was selected on account of its mica content and consequent decorative effect.

In spite of its present day use, no account of the nature of this shrine and its purpose could be obtained from the natives. Even the Katikiro (native Prime Minister) was unable to assist in this matter. A hundred yards or so from this shrine, and between it and the one-time pits, was a boulder-like mass of gneissose granite, some three feet in length, apparently split in half. The natives say it was cleft by lightning, but there is no evidence of this, and there can be little doubt that it had opened up along a joint plane in the natural course of events. There was in all probability no connection between the shrine and the pits containing pottery—unless it were a traditional one. There can be little doubt that the latter are by far the older, and that the natives had no knowledge of them until they were opened up by accident.

A little below the level of the prison, which is said to be over three hundred feet above Lake Victoria, are some houses. I am told that when these were built excavations revealed some shell banks. These would be about the level of the earlier Pluvial gravels known elsewhere around the lake; and no doubt the top of the hill was an island in those days. It was probably uninhabited. The rubble layer was clearly an old land surface and seems, by the artifacts it yields, to have been

¹ Registration number: 1931. 1-5.

² East African 1 cent coins bearing dates from 1922-1928.

occupied in later (second) Pluvial times (late-middle or post-middle Pleistocene); and it would thus appear probable that the red earth overlying the rubble accumulated during the marked dry period that succeeded the second Pluvial period.

The pottery-containing, soil-filled pits are, of course, very much younger and belong to modern

times. They cannot be dated, but one may guess that they are not many centuries old.

I am indebted to the Commissioner of Police for calling my attention to the figures and the shrine.

E. J. WAYLAND.

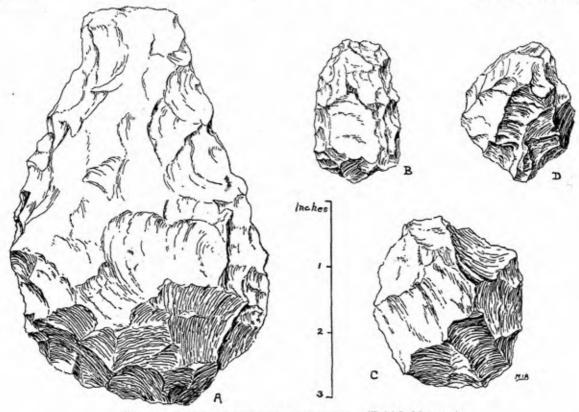


FIG. 7. QUARTZ IMPLEMENTS FROM LUZIRA. (British Museum.)
COUP-DE-POING. B. SCRAPEB. C. DISC. D. CORE-SCRAPER.

The Stone Implements.—The industry is of considerable interest. It recalls closely the one found by F. B. Macrae in the Kafue district of Northern Rhodesia at a cave near Mumbwa. A note on this site was published in Nada, the Southern Rhodesian Native Affairs Dept. Annual, for December 1926. At Mumbwa an excellent coup-de-poing was found in the bottom level of the cave; it is very similar to the Uganda example illustrated on Fig. 7a. Above the coup-de-poing level at Mumbwa occurred thick deposits containing rough tools (discs, scrapers, flakes, etc.) made of vein quartz, which again resemble those found in Uganda, a few of which are figured alongside the coup-de-poing (Fig. 7b-D). As there was no stratigraphy possible at the latter site, and as the coup-de-poing appears on the whole to be somewhat more weathered than the other tools, it is probable that the succession as shown at Mumbwa formerly existed in Uganda too. The coup-de-poing is made of quartz rock and is of a brown colour. The edges are fairly sharp considering the material, as, too, is the butt. The point has been broken off in ancient times. The other tools are made from vein quartz and are lighter coloured in appearance, being glassy over most of their surfaces, with but here and there patches weathered to a brown colour. One of the examples figured is a rough scraper made on a flake (Fig. 7b), another is a

large disc (Fig. 7c), while the third can perhaps be classed as a very rough sort of core-scraper (Fig. 7d). Mr. Wayland is to be congratulated on his new finds and it is to be hoped that further discoveries at sites where stratigraphical work is possible will be made at no very distant date.

M. C. BURKITT.

Pottery Figures and other objects from Luzira.

The collection of pottery and other objects recovered by Mr. E. J. Wayland from the shrine and the pits at Luzira is of considerable interest; but it is impossible, within the limits of space available, to give more than a brief description of them.

The Pils.—The objects excavated from the pits are evidently older than those from the shrine; I will therefore deal with them first. They fall into two groups: (a) 7 large and several small portions of human figures in pottery, and (b) a large number of small fragments of pottery vessels.

The Figures.—The figures are of particular interest, since nothing of the kind is known to be made in Uganda at the present day (where in fact representational art in any form is almost non-existent); and the surprise and alarm of the natives at finding them suggests that all memory of them had been lost. The two best preserved fragments, representing a head and a headless body respectively, are illustrated in Pl. B, Fig. I. Although it is not certain whether these two pieces belong together, the head fits sufficiently well on the body to justify, perhaps, the tentative and approximate restoration depicted in Pl. B, Fig. 2.3 The physiognomy is clearly too conventional to permit of any inference as to racial type. It is framed by rectilinear bands in relief, two of which pass across the forehead. The eyes are merely protruding lumps with horizontal slits, the nose subconical with vertical slits for nostrils, the chin very prominent, the neck ringed. On the other hand the coiffure is probably founded on fact, and distinctly suggests the 'fuzzy-wuzzy,' though I should hesitate to infer any affinity with the Hadendoa on these grounds. Mr. Wayland has described it as recalling a judge's wig.⁴ It is surmounted by a kind of pad, part of which has been broken away. The modern Baganda do not treat their hair in this way. But some of the more northerly tribes such as the Madi and Lendu are depicted by Sir Harry Johnston with somewhat similar coiffures.⁵

Technologically, the head has apparently been built up by applying lumps or pellets of clay on to a conical foundation with a smooth hollow interior. The neck has been added as a separate piece.

The body is even more conventionalized than the head, the trunk consisting of a solid column expanding at the base into a pedestal without any modelling of contours. The nipples and navel are indicated in relief. The arms and legs are stick-like, the hands resting on the knees. Curiously enough only the lower half of the legs is shown, the thighs being omitted (or perhaps fused with the former)—surely an anatomical solecism! Both arms and legs carry a number of prominent rings. Altogether I cannot suggest anything analogous to this figure in African art. In addition to the pieces illustrated there are two other portions of bodies, which were hollow, two portions of solid columnar trunks and an arm and lower leg in one piece, similar to those illustrated. On one of the trunks the breasts are shown outside the arms (which are broken)—another anatomical curiosity necessitated by exigencies of space.

The clay used is somewhat coarse, and has been imperfectly fired, a thin section of the exterior being grey and the interior black. The surfaces have been partly discoloured to a buff or pinkish tint by the soil in which they were buried.

The Potsherds.—The sherds are of variable but fairly fine texture, imperfectly fired, with red, black or buff surface colouring. The fragments are too small and too few to permit of any reconstruction; some are evidently from large vessels. There are several thick bases, one of which is slightly concave. No handles were found. The majority of the pieces differ in their ornamentation from modern Baganda pottery, the commonest markings being series of parallel horizontal grooves of varying thickness and interspacing. Other forms of ornament are cross-hatching, punched dots and overlapping thumbnail impressions. Some pieces are plain. But the most interesting thing to me is the occurrence in each of the three pits excavated of a small fragment marked with the typical impressions of a plaited roulette,

It is only fair to add that Mr. Wayland disagrees with this restoration.

⁴ Uganda Geological Survey, Annual Report, 1929,

⁵ H. Johnston. The Uganda Protectorate. Vol. II, figs. 415 and 420.

⁶ Mr. L. S. B. Leakey informs me that some of the sherds resemble his neolithic from Kenya.

of the kind in common use among the Baganda and neighbouring tribes to-day. This provides a small but distinctive cultural link for the whole find with the living inhabitants of the same region. It does not necessarily connote a very recent date, since potsherds of the same kind have been found in the old middens of Biggo bya Mugenyi, which are traditionally assigned an age of at least five or six centuries. But in the present state of our knowledge we are hardly justified in attributing a higher antiquity than this to the pits, and it is fair to suppose that the figures are no older than the sherds with which they were associated. I am inclined, therefore, to concur with Mr. Wayland in supposing them to be only a few centuries old—at any rate not anterior to the foundation of the Baganda kingdom 32 generations ago.

The Shrine (Text Fig. 6).—The 'shrine' is known to have been in use till quite recently, and the coins found in the pot, dating from 1922–1928, are sufficient proof of this, if any were needed. Of the pottery objects placed round the pot a representative selection is illustrated in Pl. B, Figs. 3 and 4. They comprise small conical pendants pierced longitudinally, a larger one with transverse

perforations, rings, crescents and a cylindrical object (possibly a phallus). These presumably amulets of the kind described by Roscoe, who includes in his list of 'fetishes' crescents, kidney-shaped objects and perforated discs "made of "clay mixed with other sub-"stances," and whose illustration shows also a conical pendant closely resembling these.8 The pottery is coarsegrained, and contains large pieces of mica, or in some cases quartz, producing a glittering effect probably connected with magic.

A few cowries were found with their backs perforated—probably also from amulets.

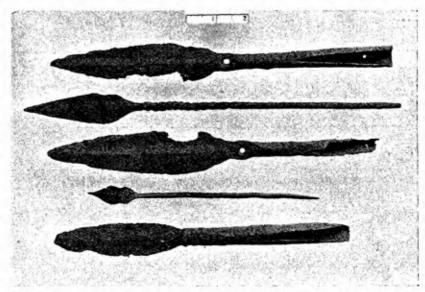


Fig. 8. Iron spear-heads and an arrow-head from the shrine at luzira.

(British Museum.)

The iron objects, all considerably rusted, comprise spear-heads, an arrow-head, knife-blades, a socketed hoe-blade, bangles and a dog or goat-bell. Most of these do not call for special comment. The spear-heads are of two types, tanged and socketed respectively, two of the latter being provided with an eyelet between blade and socket, no doubt for riveting to the shaft (Text Fig. 8). This is not a modern Baganda type, and I cannot match it among the British Museum collections. The tanged spear-head is also peculiar for Uganda. Some of the blades have an ogee section; others are flat.

There is no reason to connect the shrine with the pits, nor to attribute any age to the former. We do not know to whom the shrine was devoted. According to Roscoe, some spears captured from enemies were sacred to Kibuka, the war god, who was also represented by a conical object in his temple. I do not know whether a deity of Kibuka's importance might have had minor local shrines in addition to his proper temple; but if so, one is tempted to suppose that he may have been the genius loci of Luzira. Perhaps future inquiry might yet elicit some information on the spot.

H. J. BRAUNHOLTZ.

⁷ The Official Gazette, Uganda Protectorate, Vol. II (1909), p. 28, contains a brief account by Mr. Wayland of Biggo bya Mugenyi (="The Stranger's forts") in

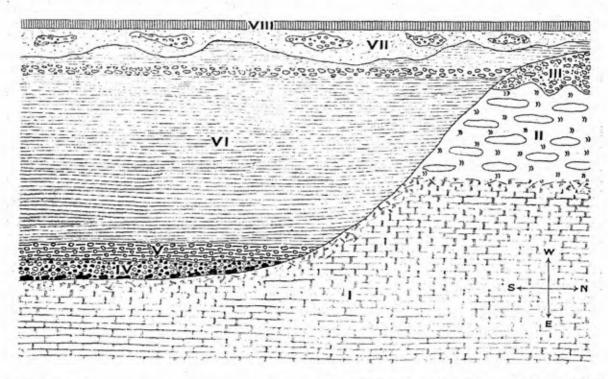
N. Budda, Masaka. But no detailed investigation has been published of this interesting site.

FIGURE 1.

		FIGURE 1.		
LOWER THAMES SEQUENCE,		GLACIAL CYCLES AND CULTURE PHASES.	East Anglian Sequence.	
Surface-soil. Alluvium and Peat. Lowe	Silting - up of Sunk Channel No. 2.	Recent, Roman, Iron, Bronze, Neolithic, Epi-palæolithic.	Surface-soil. Alluvium and Peat of the Orwell es- tuary and Gip- ping valley.	Silting - up of the Fen Basin.
Gravel and Loam of Lower Flood Plain at base of Sunk Channel No. 2.			Gravel at base of Fen Basin.	
Occupation LevelUxbridge. Gravel and Loam of Upper Flood Plain, Low, or 25-ft. Terrace.		Magdalenian.	Occupation LevelIpswich. Gravel and Loam of Flood Plain of the Gipping, Colne, and Lark valleys.	
Admiralty sections, Whitehall.		Solutrian.	Occupation LevelIpswich, and in the Colne valley.	
			Gravel and Loam formed during the retreat of the Brown Boulder-clay glaciation.	
StonyLoamwith 'rafts' of Coombe Rock, and the 'Trail.'		4th Glacial phase.	Hill-wash of Ipswich, etc., and the Brown Boulder-clay of Hunstanton.	
Sand and Loam of fluviatile and sub- aerial origins containing Helicella striataOccupation LevelSwanscombe, and Greenhithe. Gravel and Loam of Taplow, Middle, or 50-ft. Terrace, with occupation levels, as at Acton, Crayford, and between Northfleet and Swanscombe.		Proto-Solutrian, Aurignacian, Upper Mousterian (Levallois E.). Middle Mousterian (Levallois D.).	Sand and Loam of fluviatile and sub- aerial origins. Occupation LevelBolton's Pit, Ipswich. Gravel and Loam of Terrace No. 1 at Bramford, and Stoke Tunnel, Ips- wich; and Nar Valley Clays.	
Gravel and Loam formed during the retreat of the Coombe Rock glaciation.			Gravel and Loam formed during the retreat of the Upper Chalky Boulder-clay glaciation.	
Coembe Rock.		3rd Glacial phase.	Upper Chalky Boulder-clay and 'Cannon-shot' Gravel (Younger).	
Occupation LevelNorthfleet. Sunk Channel No. 1. Tilbury.		Early Mousterian (Levallois C.). (Combe Capelle and Levallois B.	Sunk Channel No. 1. Orwell estuary and Gipping valley.	
Gravel and Loam of Boyn Hill, Upper, or 100-ft. Terrace with occupation levels. Swanscombe and Dartford, etc.		Early Mousterian (Levallois A.). Acheulian, Clactonian 2, Clactonian 1, (derived and striated).	Gravel and Loam with occupation levels. Derby Road, Ipswich, Hoxne, and High Lodge; and March-Nar Gravels.	
Gravel and Loam formed during the retreat of the Kimmeridgic Chalky Boulder-clay glaciation. North or left bank of river.			Gravel and Loam formed during the retreat of the Kimmeridgic Chalky Boulder-clay glaciation.	
Boulder-clay (Kimmeridgie Chalky). North or left bank of river.		2nd Glacial phase.	'Cannon-shot' Gravel (Older). Kimmeridgic Chalky Boulder-elay.	

East Anglia: Implementiferous Deposits. Burchell and Reid Moir. The Implementiferous Deposits of the Lower Thames Valley and of East Anglia. By J. P. T. Burchell. and J. Reid Moir.

A close examination of the implementiferous deposits of the Lower Thames Valley has led us to realize that they are to be correlated with certain others in East Anglia. It would appear that the Lower Thames deposits mentioned hereunder—from the Boulder Clay beneath the Boyn Hill or '100-ft.' Terrace at Hornchurch to the Flood Plain beds—are to be equated with those in East Anglia represented by the Kimmeridgic Chalky Boulder Clay, and the inter-glacial, glacial, and post-glacial formations which succeed it. We have ventured to set out our views upon this matter



Stony loam containing an occasional 'raft' of Coombe Rock. Brickearth and gravel of 50-foot submergence with surface-level at 75 feet above 0.D. Gravel formed almost entirely of Tertiary pebbles.

Brecciated gravel with large flint nodules at base with base level at 25 feet above O.D.

Melt-water gravels of Coombe Rock glaciation.

Chalk with shattered surface.

DIAGRAMMATIC SKETCH, NOT DRAWN TO SCALE, OF DEPOSITS COMPOSING THE "50-FOOT" TERRACE FEATURE BETWEEN NORTHFLEET AND SWANSCOMBE.

in the accompanying Table (Fig. 1), and it will be noticed that the Taplow or '50-ft.' Terrace of the Lower Thames is regarded as underlain by Coombe Rock, and thus falls within the 3rd Inter-glacial epoch of East Anglia. The 'trail' is correlated by us with the 4th Glacial phase of East Anglia. During the course of our investigations we have observed that the Boyn Hill or '100-ft.' Terrace, which at Dartford attains a surface-level of 136 feet above O.D., contains no pene-contemporaneous hand-axes of greater age than that of the St. Acheul 1 period; whilst the coarse, unstratified, meltwater gravels which rest upon the surface of the Coombe Rock include derived Early Mousterian (Levallois) implements and tortoise-cores in addition to artefacts of earlier periods.

We maintain that the deposits of the Taplow or '50-ft.' Terrace, which at Acton reach a surfacelevel of approximately 100 feet above O.D., were formed subsequently to the deposition of the Coombe Rock which overwhelmed the Early Mousterian (Levallois) factory-site at Baker's Hole, Northfleet Evidence in support of this contention is supplied:—(a) by the base of the gravel underlying the brickearths of the Taplow Terrace which is composed (as at Slades Green and elsewhere) of a remanie formed from Coombe Rock and its associated melt-water gravels: (b) by the truncation of the Coombe Rock by the deposits of the Taplow Terrace at Belmont Castle, and between Dartford and Stone, and elsewhere: (c) by the high and steep-angled cliff between Northfleet and Swanscombe which has been cut through Coombe Rock and Chalk and against which the Taplow deposits are banked.

During the early part of the renewed period of elevation which followed the maximum of the Taplow submergence, fluviatile and sub-aerial loams characterized by *Helicella striata* (Müll.) were deposited which sealed-in occupation-floors of the Aurignacian epoch containing flint implements and pottery fragments. The succeeding or 4th Glacial phase is represented by stony hill-wash containing 'rafts' of Coombe Rock and/or by the 'trail'; the former may be studied at Grays and Swanscombe, whilst the latter is well developed at Belmont Castle and at Slades Green, where it caps the Taplow deposits. The 'trail' never overlies the deposits of the Low or '25-ft.' Terrace.

The formation of the Sunk Channel No. 2 and its subsequent in-filling constitute the latest

geological phenomena of the Lower Thames district.

The results, both archæological and geological, that we are obtaining will be fully described in a future paper; if our views are found to be correct, it follows that no implementiferous deposits earlier than those of the 2nd Inter-glacial period of East Anglia are present within the valley of the Lower Thames, and that these deposits were laid down from Clactonian 2/Acheulian times onwards.

J. P. T. BURCHELL.

13th June, 1932.

J. REID MOIR.

Folk Lore.

Sigmund and Bu Zeid. By the Right Honourable Lord Raglan.

Raglan.

31 In his 'Arabia Felix' Mr. Bertram Thomas gives a number of stories, told in the southern desert, of Bu Zeid, the cult-hero of the Beni Hilal, a legendary tribe of South Arabia. The incidents in these stories bear a close resemblance to those in the Volsunga Saga, so close that it seems impossible to avoid the conclusion that the two sagas are derived from a common source.

It is to be noted that in the earlier version of the Volsunga Saga, that quoted in *Beowulf*, there is no mention of Sigurd, and the dragon is killed by Sigmund. In the later version the feats are divided between Sigmund and his two sons, Sinfjotli his son by his sister, and Sigurd his son by his wife, while in the *Nibelungen Lied* Sinfjotli disappears, and Siegfried (Sigurd) becomes Sigmund's son by his sister. Similarly in the Bu Zeid saga Dhiyâb bin Ghânim is absent from some of the stories, while in others he plays the part sometimes of Bu Zeid himself, and sometimes of his son 'Azîz.

A mysterious stranger smites a great sword into a tree-trunk, so that none can draw it out except Sigmund.

Poison cannot harm Sigmund.

Sigmund and his sister Signy are the last survivors of the Volsungs. Signy comes to her brother's bed in disguise, and bears him a son, the hero Sinfjotli.

Sigmund sets Signy's two sons by her husband successively to bake bread under difficulties; they fail; Sinfjotli tries last and succeeds.

Sigmund becomes jealous of his son's prowess, and tries to kill him, but the pair are reconciled.

Sigmund and Sinfjotli are transformed into wolves.

Mysterious strangers bring on a camel a sword so heavy that none can lift it except Bu Zeid,

Bu Zeid is invulnerable.

Bu Zeid refuses to have children by his wife, so the tribesmen, not wishing the line to die out, send his sister to his bed unknown to him, and she bears him a son, the hero 'Azîz.

Bu Zeid sets his wife's two sons successively to bake bread under difficulties; they fail; 'Azîz tries last and succeeds.

Bu Zeid becomes jealous of his son's prowess, and tries to kill him, but the pair are reconciled.

Bu Zeid and Dhiyâb are led by a wolf, with which they converse.

Sigmund's marriage leads to the death of Sinfjotli, who dies from drinking the third cup of poison which his stepmother offers him, after telling his father that it will be fatal.

Sigurd kills a huge dragon which lives in a cave.

When Fafnir receives his death-wound, he asks Sigurd's name. The latter replies- 'I am called a noble beast.'

Bu Zeid's amours lead to the death of 'Azîz, who dies of his wound at the third halting place from the fair one's abode, after telling his father that it will be his death place.

Dhiyâb kills a huge jinn which lives in a well.

When 'Allân (a champion) receives his deathwound from Dhiyâb, he asks the latter's name, and when he hears that it is Dhiyab (wolf), says RAGLAN. - 'That settles it.'

International Congress.

Myres.

The Proposed International Congress: Preliminary Conference at Basel, 20, 21, 22 April, 1933. By Professor John L. Myres, D.Sc., D.Litt., F.B.A.

In an earlier communication, Man 1932, 230, the hope was expressed that it might be possible to convene a preliminary Conference early in 1933 with the object of establishing that International Congress for Ethnological and Anthropological Sciences, which is so widely desired, and of which it is planned that the first session should be held in the next year when the Americanist Congress is due to meet in Europe, namely, in 1934.

By the courtesy and willing help of Dr. Felix Speiser, Honorary Fellow of the Royal Anthropological Institute and Director of the Museum of Ethnology at Basel, this Preliminary Conference is being summoned to meet at Basel on 20, 21, 22 April. The Conference will be welcomed on behalf of the City and the Educational Authority, and the sessions will be held in the ancient Burgeraatsaal. Invitations are being issued by the Royal Anthropological Institute, and those who accept are asked to address their replies to the Institute's office, 52 Upper Bedford Place, London, W.C.1. Dr. Speiser has kindly consented to reply to enquiries as to accommodation at Basel. Opportunities will be offered for studying the valuable collections of Ethnology and Folklore.

At this Preliminary Conference it is hoped that agreement may be reached in regard to (1) the scope of the proposed International Congress, and its relations with other Congresses already established in kindred subjects, such as the Americanist Congress and the International Congress of Prehistoric and Protohistoric Sciences, which held its first session in London last August (MAN 1932, 240); (2) its constitution and procedure; (3) the date and place of the first session. On all these points, expressions of opinion are invited in advance from those who are interested in the establishment of the new Congress, and will be published in Man for March or April, if received for that

purpose in time.

11.

It has been throughout understood by the promoters that the sessions of such a Congress should be timed to occur in those years when the Americanist Congress holds a session in Europe: thus alternating with those of the Prehistoric Congress, which meets in the years when the Americanists meet in America.

In this connexion it has to be noted that at its recent meeting at La Plata, in December 1932, the Americanist Congress accepted an invitation to meet at Seville in 1934. This fact will have to be taken into consideration when date and place are being discussed for the first session of the new Congress: so as to facilitate the attendance of as many persons as possible at both.

III.

In the first number of the 'Mitteilungsblatt der Gesellschaft für Völkerkunde' (January 1933) the President, Dr. Fritz Krause, publishes a full account of the replies to his circular of enquiry as to the prospects of such a Congress, on which a short note was printed, with his concurrence, in MAN 1932, 230. They should be carefully studied by everyone interested in the matter, for they include

JOHN L. MYRES.

the opinions of 54 persons, of whom 39 are ethnologists and the remainder interested in kindred studies. Of the whole number 34 are German and 3 Austrian. A very large majority of the ethnologists regard such a Congress as absolutely necessary, and would prefer a separate Ethnological Congress. But it is widely thought that kindred sciences should be recognized as far as possible, as occasion offers; and a combination of special sections and general sessions is suggested. Doubts have naturally been expressed as to the possibility of organizing such a Congress in the near future; but it is generally held that the difficulties are not insuperable.

Everyone will recognize the valuable help given by Dr. Krause in eliciting these numerous opinions and analysing the substance of them. Attention is also called to Dr. Krause's own memorandum (Man 1932, 108), and to the suggestive communication of Pater P. W. Schmidt (Man

1932, 109).

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Sociological Group.

A meeting of sociologists was held on 15th December, but as only six members attended, the meeting was adjourned till 4.30 p.m. on 17th February. In view of the fact that this is a research meeting of the Institute, it is felt that, unless a greater interest is taken in its activities by Fellows than by visitors introduced to its meetings, its continuance would not be warranted. This could only be interpreted as a failure in one of the Institute's functions and a reflection on its vitality. Fellows who are interested are therefore invited to advise the Convener Mr. J. H. Driberg, R.A.I., 52, Upper Bedford Place, W.C.I. of their intention to participate, as failing an adequate response the meeting will be cancelled, and it will be necessary to recommend the dissolution of the group. The general subject for the session is 'The Family,'

different aspects of which will be considered at each meeting.

African Group.

A meeting of the group on 15th December was attended by representatives of the International Institute of African Languages and Cultures, the School of Oriental Studies, and the British Empire Society to consider the Chairman's proposals for the compilation of a catalogue raisonnée of African tribes. These Institutes and Societies gave assurances of their interest in the project and promised their co-operation. Those Fellows of the Institute, who have African knowledge and experience and are willing to place it at the disposal of the group, are requested to communicate with the Chairman, as it is imperative that every source of information should be tapped.

OBITUARY.

Baron Erland Nordenskiöld: born 19 July, 1877:

When Baron Erland Nordenskiöld passed away, there was lost to ethnographical research one of its outstanding exponents. His successful journeys of exploration in different parts of South America have enriched Swedish museums with large and important collections from little known Indian tribes as well as from extinct and often even forgotten cultures. In numerous genial writings he worked up his field material and thereby partly converted these collections into His working methods in international property. the realm of comparative ethnography are distinguished by an acutely critical sense and scientific exactitude, and by them a younger generation of students, in this country as well as beyond its borders, has been strongly influenced.

Nils Erland Herbert Nordenskiöld was born on 19th July, 1877. His father was the famous scientist and explorer Baron Nils Adolf Erik Nordenskiöld, the discoverer of the North-East Passage, who above all gained his world-renown through the Vega Expedition of 1878–80, by which the circumnavigation of the Old World was accomplished for the first time.

Erland Nordenskiöld grew up in a home which was one of the foci of the scientific world, and thus in his early age he made acquaintance with explorers and men of science. His interest in America was awakened through some notably successful archæological researches carried out in Colorado by his elder brother, Gustaf. At the university he gave his main interest to zoology, and in 1899 he made a journey to Patagonia, where at Ultima Esperanza he explored some caves containing remains of mastodon in association with vestiges of human habitation. During the years 1901-02 he was the leader of the Swedish Chaco-Cordillera Expedition, in the course of which he, together with three other Swedes, conducted ethnographical, archæological, zoological and botanical researches in northwestern Argentine and eastern Bolivia. In 1904-05 he journeyed in Peru and Bolivia, and special interest attaches to the investigations that were then made of ancient graves in the border districts between Peru and Bolivia. His next expedition, in many respects one of his most important, was

undertaken in the years 1908-09. During this he lived the life of an Indian in the midst of primitive tribes of El Gran Chaco who at that time remained almost untouched by European civilization, and also studied some more or less aboriginal tribes in the Bolivian low country. There he further carried out extensive excavations of mounds dating from the pre-Spanish era and in that connection discovered, among other things, traces of a cultural current that had its origin in Central America. The abundant experiences he had gained during this journey prompted him to revisit, in 1913-and now accompanied by his wife-the lowlands of Bolivia and the adjoining districts of Brazil. This expedition, although it proved productive of rich results and filled out many spaces hitherto 'white' from an ethnographical and archæological point of view, he was, however, compelled by the World War to bring to an end earlier than he had reckoned upon.

The autumn of 1926 Nordenskiöld spent in lecturing at Berkeley University in California, and immediately thereafter he made an expedition to Panama and Colombia, in which the present writer took part as archæologist. From the up to that time unknown Chocó tribe inhabiting the primeval forest country inland of the Pacific coasts of southern Panama and Colombia he then acquired magnificent collections. Among the Cuna Indians on the Atlantic coast of Panama, Nordenskiöld discovered a picture script which is still in use and employed in recording songs, incantations, etc. In 1931, through his intervention, a young Cuna Indian set out for Sweden where he, during his subsequent six months' sojourn, in collaboration with Nordenskiöld, compiled a number of works on the history of his tribe and its religious conceptions. This exceedingly valuable material had almost reached completion when Nordenskiöld died.

That Nordenskiöld was so eminently successful in his ethnographical field-work was in a large measure due to his warm sympathies towards the Indians. He gained their confidence, understood them, and enjoyed being at home among them.

During the years 1906-08 he acted as amanuensis in the ethnographical department of the Natural In 1913 he was History Museum at Stockholm. appointed Keeper of the Ethnographical Section of the Gothenburg Museum, a post which he retained at the time of his death. Under his management the collections expanded at a rapid rate. was he an outstanding collector, but he also in a high degree possessed—as a museum man to the manner born-the flair of seeking out, and interesting in the advancement of his museum, magnates capable of bestowing generous donations. result, to-day it possesses collections which both in regard to quality and quantity may safely be said to surpass the museums of Europe and very successfully compete with the leading ones of America.

In the province of museum technique Nordenskiöld was in many ways an innovator, in being which he, inter alia, framed a system of his own. According to his opinion, a museum should provide

information and instruction, in other words, constitute a living ethnographical textbook. The collections are arranged geographically and supplemented with photographs showing natural surroundings, racial types, buildings, etc. The use of weapons and implements, as also technical methods, are illustrated, whereby the visitor is given an insight into the life of the Indians at work and at



play; their struggle for existence, their habits and customs. In addition, comparative maps reveal the migrations of culture elements. By this means the visitor is apt, willy-nilly, to turn from being a mere spectator into a student.

From 1920 Nordenskiöld was a lecturer at the Gothenburg High School, and in 1924 he was installed as professor of general and comparative ethnography, a post specially created for him. As academic teacher he possessed exceptional ability together with an abundance of those qualities which captivate youth: profound learning, absolutely unbiassed and unafraid critical powers, intense love of the science he served, a wealth of ideas and brilliant notions.

Erland Nordenskiöld was a personage of no ordinary measure. As the years went by, his interests widened and his scientific activities passed on from meticulous description to comparative study, rich in ideas and unhampered by doctrines, and his last and not yet published works deal with

problems of spiritual culture—a branch in which, theretofore, he had not been particularly interested. His capacity for work was prodigious, and his passion was for science that was free and unfettered by prejudice. His activity may be said to have described an ever-ascending curve, and there was every reason to expect that through Nordenskiöld, who gave the impression of being a man in his full vigour, ethnographical science would also in the future materially add to its conquests. What ended his life were complications arising out of malaria which he had contracted during his strenuous travellings. Of him it might therefore be said that, like many another explorer, he died at his post.

SIGVALD LINNÉ.

Präcolumbische Wohn- und Begräbnisplätze an der Süd-Westgrenze von Chaco. (Kungl. Svenska Vetenskaps-Akademiens Handlingar, Bd. 36, Stockholm, 1903.)

Beiträge zur Kenntnis einiger Indianerstämme des Rio Madre de Dios Gebietes. (Ymer, Stockholm,

Südamerikanischen Tongefässe und ihre Herstellung Kungl. Svenska Vetenskaps-Akademiens Handlingar, Bd. 41, Stockholm, 1906.)
Indianlif i El Gran Chaco. Stockholm, 1910.

(Indianerleben, Leipzig, 1912.)

och Hvita i nordöstra Bolivia. Stockholm, 1911. (Indianer und Weisse in Nordost-Bolivien, Stuttgart, 1923.)

Urnengräber und Mounds im bolivianischen Flach-

lande. (Baessler-Archiv, Bd. III, 1913.)

Palisades and "Noxious Gases" among the South-American Indians. (Ymer, Stockholm, 1918.)

Forskningar och äventyr i Sydamerika. Stockholm, 1915 (Forschungen und Abenteuer in Südamerika.

Stuttgart, 1924.)

Die positiven Veränderungen indianischer Kultur in postkolumbischer Zeit. (Ipek, Jahrbuch für prähistorische und ethnographische Kunst, Köln, 1925.)

The Chocó Indians of Colombia and Panama.

(Discovery, Vol. VIII, 1927.)

The Cuna Indians of Panama. (Discovery, Vol. IX, 1928.)

Indianerna på Panamanäset. (Stockholm, 1928.) The American Indian as an Inventor. The Huxley Memorial Lecture for 1929. (Journal of the Royal Anthropological Institute, Vol. LIX, 1929.

The Ancient Peruvian System of Weights. (MAN,

1930, 155.)

L'Archéologie du Bassin de L'Amazone. Ars Americana, I. (Paris, 1930.)

Comparative ethnographical studies. Vol. 1-9. (Göteborg, 1919-1931.)

Everard im Thurn: born 1852: died 7 October, 1932.

Sir Everard im Thurn, who, to the regret of his many friends, died at his residence, Cockenzie House, Prestonpans, on 7 October, combined scientific attainments and marked administrative ability. He had had a remarkable and romantic career as botanist, explorer, anthropologist, and Colonial Governor.

Born in 1852 he was educated at Marlborough, under Dr. Bradley, and Exeter College, Oxford, where he graduated in 1875 and received an Honorary Fellowship in 1925. In 1877 he was appointed Curator of the Museum of the Royal Agricultural and Commercial Society of British Guiana on the recommendation of Sir Joseph Hooker, the famous Director of Kew, and thereafter he never looked back. He landed at Georgetown, Demerara, in July and, to use his own expression, spent two and a half years in about equal proportion wandering among the Indians and in the chief town. He left again on Christmas Day 1879. During this period and, indeed, throughout his residence in the Colony, where he was back again in 1881having presumably eaten labba and drunk creek water, of which it is said that he who partakes must inevitably return to Guiana-he periodically sent collections of plants and flowers to Kew, a practice which he continued during his long career in the Colonial Service. In 1882 im Thurn was appointed Stipendiary Magistrate in the Pomeroon, and in 1891 he was promoted to be Government Agent in the North-West District, an appointment which brought him into close touch with the Venezuelan Boundary Commission from 1897 to 1899, when he was made a 1st Class Clerk in the Colonial Office, where he rose to be Principal Clerk two years later. Meanwhile im Thurn had left his mark on British Guiana. In 1882 he founded 'Timehri,' the literary and scientific journal of the Royal Agricultural and Commercial Society of British Guiana, which had never yet published anything in the thirty-eight years of its existence. In the first number he explained that 'Timehri' was a Carib word, belonging to a language which was spoken in Guiana before any European tongue wagged there, signifying certain marks or figures which, like our letters and words, expressed ideas, which, to use a long word, were ideographic. Volume I of that brilliant little magazine was followed by 'Among the Indians of 'Guiana' (1883). This disclosed the extensive and intimate knowledge which im Thurn had attained of the habits and customs of the aboriginal Indians of Guiana. It embodied many papers on anthropological subjects, folk-lore, and antiquities, and an entertaining account of Paiwari Feasts. His most notable feat of exploration was the ascent of Roraima, the mysterious mountain in the Pakaraima range where the boundaries of Guiana, Venezuela and Brazil meet. It was he who discovered the edge which proved the key to that mountain hitherto regarded as inaccessible which had baffled many explorers, and his account of the expedition which was published in the Proceedings of the Royal Geographical Society (1885) is fascinating to laymen no less than to mountaineers and botanists. He was also one of the earliest visitors to the Kaieteur (1878), the great waterfall on the Potaro River, five times the height of Niagara, which had been discovered by Barrington Brown, of the Geological Survey, in 1870. After his brief experience at the Colonial Office, which must have proved irksome to one who had been accustomed to live in the wilds

for so many years, he was appointed Colonial Secretary and Lieutenant-Governor of Ceylon (1901-4), and in 1904 Governor of Fiji and High Commissioner of the Western Pacific, an appointment which he continued to fill with great ability until he retired in 1910. Thereafter he was properly regarded as an authority on the Colonies in which he had served, and his advice was constantly sought and ungrudgingly given.

At the outbreak of war Sir Everard readily accepted the invitation of Lord Milner to look after the officers, non-commissioned officers and men from Fiji, and to be Chairman of the West Indian Contingent Committee, and it was largely due to his persistence and efforts, which had the support of seven late Governors of West Indian Colonies. that the increased pay and gratuities granted to the rest of the Imperial Army, but at first withheld from the British West Indies Regiment, were ex-

tended to that unit. His solicitude for the welfare

of those under his care was unbounded, and his constant good humour and patience made him an ideal chairman with whom it was a pleasure to work. These characteristics stood out when he was incapacitated for several weeks through being knocked over by a tramcar when he was crossing the darkened embankment from Scotland House to see a captured German submarine. Describing what happened he said that he remembered that the driver of the tram had called out "You are a — old fool!" and that he had replied, "I quite agree with you!"

Sir Everard received the C.M.G. in 1892 and the C.B. in 1900. He was created a Knight of the Order of St. Michael and St. George in 1905, and received the K.B.E. in 1918 in recognition of his war services. He also had conferred on him the LL.D. by Edin-

burgh and Sydney Universities.

He was married in 1895 to Hannah, daughter of Sir Robert Lorimer of Edinburgh University, who ALGERNON ASPINALL. survives him.

REVIEWS.

PHYSICAL ANTHROPOLOGY.

The Evolution of Sex and Intersexual Conditions. By Dr. Gregorio Marañón. Translated from the Spanish by Warre B. Wells. With new appendix. Pp. 344. London: Allen & Unwin Ltd., 1932. Price 15s. net.

The author of this book is well known as the most prominent authority in Spain on the physiology and pathology of sex, as well as on the problems offered by the ductless glands, and he is Professor of Endocrinology (which amusingly becomes 'Endoctrinology 'on the jacket of this volume) at the University of Madrid. He has lately resigned the Presidency of the Spanish branch of the World League for Sexual Reform, and one at least of his books has previously appeared in English. His interests are wide; he took a most active part in bringing about the Spanish Republic, and he is a member of the

The present volume is a study of the evolution of sexual and intersexual characters from the standpoint of a special conception of sex : the view that in both sexes there is development in the same direction, from the so-called 'feminine' towards the so-called 'masculine,' the rhythm, duration, and intensity of the evolution varying in the two sexes. The author further emphasizes this conception in a special preface for the English edition of his book. But 'there is scarcely any human being whose ' sex is not tainted by a doubt,' and hence the wide scope for intersexuality.

While the sex process is thus viewed as the same in both men and women, the succession of phenomena is different: in women, after adolescence, a long feminine maturity, followed by a short viriloid phase, and old age; in men, after the infantile period, a short feminoid phase, and a long virile period prolonged into old age. There is thus gradation, not opposition, of 'masculine' and 'feminine,' and the man would represent the terminal phase of sexual development, that phase being arrested in women for the sake of the maternal

This conception, though it may seem to push a schematic system to extremes, is based on the now accepted views of intersexuality by which a number of stages are recognized between the more completely defined sexual forms. It has even been possible to say that a full man is rarely met. Marañón, who has himself been an active scientific worker in this field, at the same time fully accepts the existence of sexual differential characters, and seems prepared to say with Pezard that 'there is no 'morphological or psychical character without ' trace of sex,' though his own statement is that there is a latent bi-functional aptitude in every

Five chapters of much interest are devoted to the main sexual characters, anatomical and functional, primary and secondary. Marañón does not accept the useful distinction of tertiary sexual characters for such as, unlike the secondary, are uncertain in the individual, but well marked in the average. He would like to classify the characters simply as genital (directly connected with the genital organs) and sexual (covering all other differences of sex).

The main body of the book is devoted to those intersexual conditions which, as the author believes, are to be found, in a more or less pronounced shape, among a vast number of individuals. Hermaphroditism, gynecomastia, homosexuality, virilization and feminization, etc., are thus discussed in turn, with many suggestive observations which it would

be impossible here to discuss.

As may be inferred, Marañón's attitude towards women may rather suspiciously recall the ancient insistence on their 'infantility,' and he definitely subscribes to the statement of Caullery that 'the

' male represents in evolution a more advanced phase than the female.' Woman is 'the younger sister of man.' Or, as it is here more often put, the sexes are not in antagonistic, but in successive, positions,' both 'integrated by the same components, but in different chronology and succession.' At the same time Marañón insists that man and woman are 'equal.' There is some contradiction in these views. The 'equality' is considerably qualified if, as the author holds, women will approximate more and more to the men of to-day, while masculinity is already 'a terminal and almost 'perfect form.' A sounder view is reached if, when pointing out any greater morphological 'infantility' of woman, it is also made clear that the infantile has a better claim in evolution to be 'terminal' than the masculine. It is enough to refer to the familiar fact that the infant ape is morphologically much nearer to man than the adult ape.

These and other debatable points do not diminish the interest and value of Dr. Marañón's lucidly written book. In minor matters there is room for criticism. Much more familiarity is shown with the work of the Germans than of the English, some of the most prominent English authorities never appearing in the bibliographies. Proper names are often misspelt, and even Krafft-Ebing always appears as 'Kraft-Ebing.' The translator has done his work well, but it is strange that he frequently reproduces the references to English books in translations rather than in the originals; even Darwin is always quoted as a French author. HAVELOCK ELLIS.

Anthropologie des parties molles (Muscles, Intestins, Vaisseaux, nerfs périphériques). By Edward 38 Loth, with an introduction by Sir Arthur Keith.
Pages 540, 24 × 17 cms. Warsaw Fondation
Mianowski, Paris, Masson, 1931. Price 12 francs.

This is a very important work which may well prove the beginning of a new trail in physical anthropology. We have in the past devoted most of our attention to a study of the skeleton of man, partly no doubt because it is easier to deal with, and partly because in tracing man's history a few broken bones are often all that survive. On the other side, the human anatomists have studied intensively the normal human form as represented in those subjects which came into the dissecting-room. Extremely little work has been done to connect the very extensive researches on human osteology with the very intensive work that has been done on the soft parts, and this despite the fact that physical anthropology may be said almost to have had its birth in Dr. Tyson's famous work on the anatomy of a 'pygmie.' The present work is an attempt to collect together such material as is available for the study of the comparative anatomy of the different races of man. The material is necessarily at present limited, and on some races few, if any, accurate dissections have been done. The work, moreover, is very laborious, but the results so far achieved show what a field is open to the skilful dissector who has the material at hand. Sir Arthur Keith, in his introduction, draws attention to the opportunities which are open within the British Empire for such work. How much there remains to be done will be seen from Dr. Loth's book. At present the material is such that only a comparatively crude grouping is possible. We may hope that in the future a greater

precision will be attained. The greatest praise that we can give to the present book is to anticipate that it will so stimulate anthropologists that it will be soon superseded by a more complete treatise, either by the learned author himself, or by a disciple who has followed in his L. H. D. B.

LINGUISTICS.

Grammar, Notes and Vocabulary of the Language of the Makuchi Indians of Guiana. By Rev. James Williams, 'Anthropos,' Tome viii, 1932. Pp. 413.

At last we have a simple, concise and scientific grammar of one of the Guiana Indian tongues. Not a lengthy vocabulary with the units doubtfully or wrongly spelt, but a concise, real and live account of the structure of the language-that of the Makuchi, of the Carib linguistic stock. Just the type of work that it is to be hoped will be followed by others interested in this department of study. The author is to be particularly congratulated on the paragraphs relative to the inflexions of verbscertainly the most difficult to understand-the composition and employment of adverbs, adjectives, and propositions. These parts of speech have hitherto proved great stumbling-blocks to the students of Guiana linguistics, but the manner in which they have been arranged and discussed in the present volume will assuredly render them quite intelligible. Two other valuable assets that must not be lost sight of are a complete bibliography from the earliest times, and the inclusion of the many authorities whence information has been derived—information which so many writers are apt to forget! Even Christopher Davidson, 'good old Christie,' with his little church at the back of Toka, is not forgotten. The author, who spent some six or seven years in the back blocks with the Indians under consideration, had ample opportunities-probably more than anyone else-of studying their language, and is still remembered by many a redskin with love and respect. With the publication of this volume there is now no need of a further Makuchi grammar. W. E. ROTH.

FOLK LORE.

nds and Mysteries of the Maori. By Charles A. Wilson. George G. Harrap & Co., Ltd., 1932. 8vo., pp. 240. 8s. 6d. net. Legends and

This book is written by one who has lived among the Maoris, the native peoples of New Zealand, and who knows and loves them. The legends and stories recorded in the book seem to have been collected through the medium of the native language, though no direct statement is made to this effect. Some of the stories are old and well-known ones re-told; others are told here for the first time. The latter were obtained from the wife of a Maori chief, who himself had been a member of Parliament in New Zealand. The claim is made that they contain imagery and anecdote sufficiently well " expressed to place them high in the world's masterpieces of folklore."

Throughout the book the author urges the anthro-pological value of the matter therein presented, but the style of writing is hardly that which is necessary for the setting out of anthropological material. would suit better a popular narrative; for anthropological purposes the original language of the tales is preferable to the rather dramatized versions given. There is constant reference to 'Unseen Hands,' to the 'Unseen People,' to 'Unseen Ancestors,' ideas foreign to the minds of native informants; and the many

references to the mystic power of the 'Four Winds' seem a new feature in Maori religion.

The so-called claim of the Maoris to cousinship with the Japanese (p. 16) rests, perhaps, on no more definite grounds than the connection traced by Professor Labberton between certain Japanese words and words occurring in the Pacific, both in Melanesia and in

Polynesia.

One would prefer to see the h left out of the word Pah, the name for the fortified Maori stockade. On p. 70 the statement is made that the Maoris had no throwing weapons. But Williams' 'Maori Dictionary' gives kotaha as "a rod, with cord attached, for throwing a "dart." The statement on p. 75 that most primitive peoples are phallic in their worship surely needs qualification. On p. 82 the fish known in New Zealand as 'Pelorus Jack' is said to have been a porpoise. The fish is a white dolphin, classified as 'Risso's-dolphin,' Grampus griseus.

The reproduction of paintings depicting legends, beliefs, and historic occurrences connected with the Maoris, adds a considerable charm to the book.

WALTER IVENS.

Asiatic Mythology. By various Authors. Introduction by Paul-Louis Couchoud (English translation by F. M. Atkinson). London, 1932. 4to, pp. 460. 41 15 plates and 354 illustrations. Price £3 3s. 0d.

The Guimet Museum in Paris is a foundation almost without parallel elsewhere; for it is not a museum only, a storehouse of materials for comparative study, but an institute with a distinguished staff, like a college, of specialists in various religions of the East, and it has published a long series of memoirs, in great part the result of studies suggested and illustrated by its own collections. Its founder and organizers have their reward in the revival of learned, and even of popular interest, in Oriental religion and mythology, and the representative arts which are inspired by them; and in the recognition of the Musée Guimet as a principal centre

of these studies.

It was a happy thought, to persuade some of the distinguished members of the Museum's staff to collaborate in a systematic but acceptably popular account of the main outlines of the mythologies of Asia, and to illustrate it so fully from the Guimet collections. Whether, as M. Couchoud contends, in his spirited introduction, modern interest in Oriental religions is " a great spiritual current, the strongest and deepest that has " touched the Western world since the Renaissance," is a question too large for discussion here. But it was certainly time that we had such a counterpart as this to the handbooks of classical antiquity and mythology which were produced in the latter part of the last century, with the happiest effects on the study of Mediterranean cultures. And people who can afford to enjoy modern facilities for travel in the Further East will do well to acquaint themselves with the foretaste offered in this volume, before they are confronted with the architecture and greater monuments of the same cultures and beliefs in their native lands.

Among the greater mythologies, those of Persia, including what is left from Achaemenid, Arsacid and Sassanid times, as well as that of Muhammadan Persia, and the special contribution of Manicharans and Mazdakites—are described by Clement Huart; Buddhist mythology in India by Mlle. Raymonde Linossier, and Brahman mythology by H. de Wilman-Grabowska; those of Indo-China and Java by C. H. Marchal; of modern China by Henri Maspero; of Japan by Serge Eliséev; and J. Hackin deals briefly with the Kafirs, Lamaism, and Buddhism in Central Asia. So far as Buddhism is concerned, some duplication is inevitable, but the regional schools of art at all events are distinct, and there is everywhere so much indigenous myth, as distinct from dogma, that this arrangement of subjects is appropriate.

In a work which depends so much on its illustrations, Muhammadan mythology could hardly fail to be underrepresented; and it was a desperate remedy to decorate the short chapter on Kāfiristan with pictures of a Kafir family and of statues on Easter Island. A popular work of this kind may dispense with references and bibliography, but is rightly provided with a full index. The copious illustrations are for the most part photographic, and very well done; and the coloured plates are admirable. It gives a touch of reality to the whole collection to find, on p. 398, a Japanese photograph entitled, "Believers invoking the Rising Sun to obtain "the Restoration of the Emperor, November, 1926."

J. L. M.

A Spell of Words. Studies in Language bearing on Custom. By L. Eckstein. Pp. xix + 289. London, The Favil Press, 1932. 7s. 6d. net.

It is unpleasant to be unable to speak well of the dead. The authoress of this book lived, a short prefatory notice tells us, "only long enough to begin seeing it through the press"; she appears to have been a lady of wide reading, keen interest in folklore and philology, and considerable ingenuity, and had already written several works, a list of which appears at the end of this one. One is therefore prejudiced in her favour, and troubled to find that she apparently did not know what accuracy meant, nor what constitutes evidence in those branches of science which most attracted her. Starting in each chapter from some familiar object or word, as hare, broom, axe, or a custom, as April fools, she attempts to find out its origin and connections. But unhappily she saw most clearly those connections which do not exist, and suffered severely from the beginner's weakness of trying to trace all popular customs and widespread locutions to a very remote age, in which such interesting things as universal mother-right, cavedwellings, dwarfish populations, and so forth can be postulated for Europe or anywhere else without much fear of contradiction from known facts.

The reader, if fairly well-informed to begin with and not deterred by the gross blunders in fact which swarm on almost every page, may pass an amusing hour detecting fallacies and perhaps, here and there, picking up, subject to verification, some scrap of custom or word-lore which is new to him.

H. J. R.

CORRESPONDENCE.

The Nilotic Sudan and West Africa.

SIR,—In their recently published work on 'The 'Pagan Tribes of the Nilotic Sudan,' Professor and Mrs. Seligman, in referring to the relationship of the peoples of Southern Kordofan with those of the

hinterland of Nigeria and the Gold Coast, draw attention (p. 16) to the distribution of the word for 'god' or 'sun' which is tel among the Ingassana of Darfung, tere tele or teli in the Mandingo group of West Africa, and tili or til in the hinterland of Sierra Leone and on the

Till = God (lit 'master,' 'lord') occurs Upper Volta. in numerous Nubian texts of the Christian period.

It may be of interest to add that til in the sense of 'chief' or 'king' occurs among the Margi and Kilba of North-Eastern Nigeria. Among the Hinna and Hona, who are close neighbours of the Margi and Kilba, the prefix ku- is added to the stem and the word for 'chief' becomes kudir or kudiri or kutira.

In the same area of Nigeria we seem to find the same root in the sense not of 'sun' but of 'moon,' e.g., tir (or tirre or tirri) among the Higi, tirri among the Fali, tira among the Ngizim, tere among the Bolewa, the Kanakuru and the Ngamo, and tirre among the Mandara K. MEEK. (French Cameroons).

Northern Solomons: Pandanus Hood.

SIR,-As an indication of the tendency on the part of the Buka (Northern Solomons) native to relinquish old customs, it may be of interest to record that the wearing of the utau (pandanus hood)



GROUP OF BUKA WOMEN WEARING THE PANDANUS HOOD OR UTAU TO PREVENT THEIR MALE RELATIVES SEEING THEIR HAIR.

by the women on the islands of Pororan and Hitau has been discontinued. The custom of halis (covering the head when certain male relatives are present) has been observed by the Buka women for generations, and

was looked upon as one of their most important 'tabus.'
The discontinuance is due, I am informed by the natives, to mission influence; as it is alleged that the utau is inconvenient for the priest when he is administering the sacrament to the women. The enclosed photograph shows women wearing the utau in the village of Iaparu on Pororan island, adjacent to the mainland of Buka. E. L. GORDON THOMAS.

Childhood and Totemism.

45 Sex,—In a review of Professor Elliot Smith's 'In the Beginning,' Mr. Hornblower (Man, 1932, 331) observes that in all probability "an early "stage of totemism" was "founded on the mentality of hunters who lived as it were in community with animals, looking on them in much the same way as "they did on their own kind, and who could easily "imagine themselves turned into animals or descended

" from them, as many backward tribes do to-day-and even civilized children 'playing bears' will show a " strange but real fear lest their companion should "indeed be a bear"."

Some children hardly distinguish between animals and human beings. My own niece when some six or seven years old was puzzled about relationships. I explained to her that I (her Aunt) was "Grannie's little girl." She took that in. Then she said "And Diamond (our fox terrier) is your child."

I said "Oh, no. Diamond is not my child." And she asked at once, "Then who is Diamond's mother?"

'Miss X's little dog Lulu is Diamond's mother." She thought it over and then, as if disappointed said : "Then Diamond's mother is only a dog after all."

"I knew Tortoise was not your child, She added: but I thought Diamond was."

She looked on the dog as a member of the family. Nor is such an idea confined to children. The 'back-'ward tribes' in England are capable of believing that a woman can give birth to an animal. In the 1890's when I was an art student a tale was current among the artists' models that the daughter of a woll-known Westend tradesman had given birth to some puppy dogs. " And the doctor drowned them and quite right too.

The tale was told me, mysteriously, by several girls, who all declared "there was a woman who knew all about it," when doubt was cast on the tale.

If a woman can give birth to an animal, why should not an animal give birth to a human being? above case the father was alleged to be a St. Bernard

The mass of folk-tales in which animals play an important and intelligent part shows how little early

man discriminated between man and beast.

Many persons to-day will hold long talks with animals, and are convinced the beast understands. Thus a cook I knew, told her mistress that she was sure an obstreperous dog would be good, "For I have told him what there will be for dinner and promised him the bones " if he behaves himself."

And similarly supernatural intelligence was ascribed by an old lady to a black and yellow salamander.

We are here next door to "Br'er Rabbit," and primitive man is no great distance behind us. M. E. DURHAM.

Primitive Figures on Churches. (Cf. Man, 1930, 8;

1931, 3; 1932, 49 and 73.) Sir,—In the second volume of the late A. Hadrian Allcroft's work 'The Circle and the Cross,' published in 1930 by Messrs. Macmillan & Co., Ltd., he refers in a note on p. 124 to the church of Old Llan-drindod, Radnorshire. "The Church was restored in " 1894 when there was found imbedded face-down in " one of the walls an extremely gross phallic slab." again mentions this in the note at p. 50 of the same volume, where he says that the "dolmen idol" standing in the churchyard of St. Martin, Guernsey, "cannot be "compared with the gross phallic figures found in the "fabric of the church of Old Llandrindod and elsewhere " in Wales.

It would be interesting to know the whereabouts and exact nature of this slab, also of the other "figures . . . "found . . . elsewhere in Wales."

DAVID FREEMAN.

CORRECTION.

Craftsmen's Measures in Pre-MAN, 1932, 236. historic Times. Ludovic McLellan Mann. The reviewer regrets that the figures given were incorrect; for 62 read 69, for 38 read 83.



MAN, MARCH, 1933.

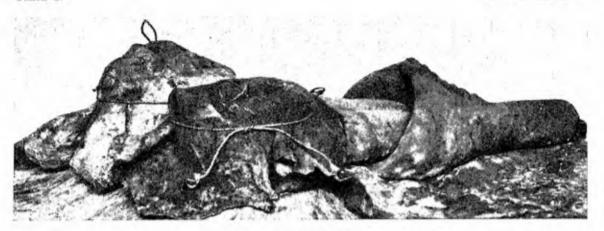


Fig. 1. SET OF BELLOWS.



Fig. 2. The working portion of the forge reconstructed.



Fig. 3. BELLOWS WITH COVERS REMOVED.

IRON WORKING IN THE SUDAN.

MAN

A MONTHLY RECORD OF ANTHROPOLOGICAL SCIENCE

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XXXIII, 48-62

MARCH, 1933.

ORIGINAL ARTICLES.

With Plate C.

Sudan: Technology.

Crawhall.

Iron Working in the Sudan. By T. C. Crawhall, M.Sc., Assistant Keeper, Science Museum.

In parts of the Bahr el Ghazal province of the Sudan iron ore is plentifully obtainable from surface workings, and the Jur tribe especially, who inhabit the region drained by the Jur river, is largely occupied in the smelting and working of iron.

They still employ very primitive methods which are particularly interesting, since the charcoal fire in which the iron is reheated before forging, and the bellows with which the fire is blown up, differ but little from those which were in use in Ancient Egypt and which are portrayed on the walls of Theban tombs of the nineteenth dynasty B.C.

With the assistance of the Sudan Government, and particularly of Captain J. F. Cumming, a District Commissioner of the Bahr el Ghazal province, the Science Museum has received some very interesting exhibits which illustrate iron-working in the Jur district, and these are now on view in the Metallurgy section of the Museum.

There are two distinct processes for dealing with the ore, the first consisting of the smelting of the ore for the production of iron, and the second the subsequent heating and forging of the iron to produce the finished product, usually spear-heads or hoes for agriculture.

The smelting furnace illustrated in Fig. 5 stands about five feet high and is made of a clay which is found in the district. For the extraction of the iron there is a hole at the bottom of the furnace, below the ground level, and this is sealed with clay during the period of smelting; the air required for combustion is admitted through four clay tubes (Shura) which are inserted in the side of the furnace near the bottom. It is of interest to note that the ore is of such a nature that only natural draught is employed and that bellows or other means for producing a forced draught, which are necessary for most smelting furnaces, are not employed.

The iron ore, which is broken into small pieces measuring about one inch cube, is separable into two distinct kinds, known to the Jur natives as the male and female elements 'Obau' and 'Okina,' and it is the general belief that both of these substances must be present before iron can be produced.

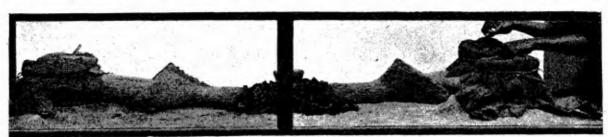


FIG. 4. THE COMPLETE RECONSTRUCTION OF THE FORGE.



FIG. 5. THE SMELTING FURNACE,

The furnace is charged with sixteen baskets of charcoal made from hardwood trees on top of which are placed three baskets of the broken ore. One such charge, which requires about twenty-two hours for smelting, is sufficient to produce eight or ten spear-heads, an extraordinarily uneconomical proposition when compared with the modern methods of civilized countries.

The iron collects in a mass at the bottom of the furnace, from which it is removed by wooden poles pointed at the ends (Obui), and as soon as it is clear of the furnace it is pulled along the ground by means of a native-made rope, and then quenched with water; after which it is broken



Fig. 6. THE FORGE.

into small pieces in order to render it suitable for treatment in the forge. The slag falls to the bottom of the furnace below the iron and is easily separated from the iron when it is hot.

The photograph shows the immense stature of the natives, most of whom approach seven feet in height, with a strength and hardiness in proportion. Their lack of tools appears to be no handicap, and, as a Jur thinks nothing of using his hands to remove a hot lump of iron, their bodies are, in consequence of the nature of their work, covered with burns. The flames issuing from the furnaces help to produce a most picturesque sight, particularly at night time.

Coming now to the forge, this is situated in



FIG. 7. SMITH AT WORK ON ANVIL.

a grass hut, partly for the protection of the workers but mainly to prevent the sun from shining on the iron, as it is believed that should this happen it will be impossible to work the iron to the shape required. For this reason the photographs which are reproduced in Figs. 6 and 7 are of particular interest, as it was only after persistent persuasion that Captain Cumming was able to obtain the permission of the smiths to allow sufficient light to enter the hut, and even then they stipulated that the sun should not shine on the fire.

The primitive nature of the industry is shown by the deference paid to the metal-worker in the tribe and by the strict observance of oaths sworn on the anvil of a dead smith. In Fig. 7 a smith

is seen at work on his anvil, which consists of a rough piece of iron driven into a palm tree buried in the ground. So firmly established is the superstitious reverence for it, that it was not possible to obtain an example of an anvil, although the Museum has been fortunate enough to obtain a set of bellows and specimens of the other tools employed and of the finished products.

The reproduction of the complete forge as now on view in the Museum is illustrated in Pl. C, Fig. 2, and in Fig. 4, while Pl. C, Figs. 1 and 3, show two views of the bellows by means of which the charcoal fire is raised to the temperature necessary for softening the iron sufficiently for it to be worked. There are four bellows to each fire. It is in the form of these bellows that there is such a distinct resemblance to those used in Ancient Egypt which are illustrated in Fig. 8, taken from a drawing from a tomb at Thebes in Upper Egypt (about 1500 B.C.).

The bellows are made of clay and are covered with goat-skins which are given an alternating upward and downward movement in order to produce the draught. As no valves are used it is not possible to insert the clay stems directly into the fire, as there would then be no air inlet into the bellows, and consequently each pair rests in a clay junction unit, which has one end in the fire and the other end open to the atmosphere. In this way, on the upward movement of the goat-skin cover, air is drawn into the bellows and on the downward movement a portion of the air, sufficient for raising the temperature of the charcoal, is forced into the fire through the junction unit.

By working the goat-skin covers of the pots a series of puffs of air is driven into the fire and its temperature raised to the point necessary to heat the small pieces of iron from the smelting furnace which are placed in clay pots (Nginos) on top of the charcoal; and although the temperature of the fire is not sufficient to melt them, they can be made sufficiently soft to be worked by the smith into spear-heads and other implements. The pots are about the size of a tea

cup, each holding sufficient iron for one spear-head. The first act of the smith is to flatten the iron on a stone by allowing a large stone to fall on it, after which he hammers it into shape by means of a piece of iron without a handle, known as a Nyol Ujanda.

Besides the spear-heads the Jurs make an agricultural implement, known as a 'Quer,' which is used for currency. Mostof the products of the smith are used for trading with neighbouring tribes, particularly the Dinkas, who exist by hunting and fishing.

T. C. CRAWHALL.

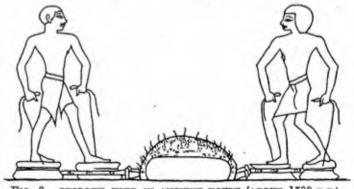


Fig. 8. BELLOWS USED IN ANCIENT EGYPT (ABOUT 1500 B.C.).

Fiji: Fire-Walking.

Roth.

The Fire-Walk in Fiji. By Kingsley Roth.

49 The custom described below is usually spoken of as the Fire-Walk. It is performed only by the members of the Sawau group and their vasu. This group inhabits the island of Mbengga, which lies about 12 miles south of Viti Levu, the main island of the Fiji archipelago. Vasu is the name used for the relationship of the sister's son.

In the Mbengga dialect the fire-walk is called vilavilairevo, which may be translated 'the jumping 'into the oven.'

It was the duty of the priests (mbete) —a sub-division of the Sawau group—to decide the occasions for the performances, and by custom these took place during a period when the root of the masawe—a species of Dracaena—was ripe, i.e., roughly speaking during the months of June, July, and August in

the European year.

The *Dracaena* is an herbaceous shrub with a large edible root which Fijians chew or use for sweetening puddings. It is baked before being so used.

The custom described.—The performance about to be described took place at the village of Ndakuimbengga on Mbengga island. An earth oven is prepared by digging a hollow in the ground about 15 feet in diameter and 3 feet in depth. In former times the size of the oven used considerably exceeded these dimensions. Firewood is brought, placed in the oven, and stones laid on top of these logs, to which fire is then applied (Figs. 1 and The stones used for this Dracaena oven are of one kind only, viz., Mbengga basalt (vatu



Fig. 1. SHOWING LOGS BEING PLACED IN THE OVEN,

ndina). The logs are intended to impart heat to the stones in the oven. No particular wood is used for this purpose, any kind that burns well being considered suitable. Nearby are some bundles of *Dracaena* root wrapped up in roughly made baskets of green coconut leaf; also a number of green poles 10 or 11 feet long, to one end of each of which is fastened a loop of bush creeper (walai), Entada scandens. No special tree is used for these poles. The heat rising from the oven is perceptible some distance away, and definite discomfort is felt at a fathom distant from the outer edge of the oven. As the heat becomes intense some of the stones fracture and small pieces fly up out of the oven.

At an appointed time 24 men in ceremonial dress of leaves and dried and dyed grasses approached the oven. These men, whom we will call 'operators,' were not the same individuals as those who subsequently walked over the stones, whom we may call 'performers.' The operators brought with them a length of some 25 feet of unprepared stout creeper (walai) about two to three inches in diameter. They walked round the oven and laid down the creeper. They then individually took the poles already mentioned and seized the burning embers one by one with the loop provided on the end of their poles. A hold was obtained on the ember by twisting the pole longitudinally and so lessening the size of the loop until it gripped the ember. With a loud yell the operators dragged away each of the embers until the stones were completely uncovered. The burning logs were not particularly heavy, but there being fewer poles than men to handle them, two or sometimes three men would assist

each other in dragging out one ember. Thus all the operators took a part in the show and the scene presented was one of great activity and excitement. When all the embers were removed, it was observed that the stones were set in a heap towards the centre of the oven.

A fern-tree log, (mbalambala) Alsophila sp., about 20 feet long was then taken and placed diametrically across the oven and resting on the circumference at two points. The length of stout creeper was similarly laid across the oven next to the fern-tree log. A number of operators took their long poles and, standing at the periphery of the oven, and towards one side of and at either end of the fern-tree log, prodded their poles—holding them now by the end at which the loop was tied—into the heap of stones in such a manner as to use the log as a fulcrum to prise the stones away from the centre of the oven (Fig. 3). The poles had been so placed among the stones that the creeper, allowed to sag into the oven and touch the stones, lay between the log and the extremities of the poles. The

remainder of the operators divided themselves into two gangs, each of which took up one of the two ends of the creeper. These two gangs, working on the opposite side of the log from that where those using the poles were standing, now pulled their respective ends of the creeper and at the same time proceeded round the outside of the oven, pulling all the time, until the stones, against which the ends of the poles were thrust, gave way and were thus shifted from the centre of the oven (Fig. 4). This procedure is followed from several positions round the oven, the pole-operators and the creeper-operators changing their stance accordingly until all the stones are more or less evenly distributed so as to



FIG. 2. THE OVEN: THE LOGS SHOWN COVER THE STONES WHICH ARE IN PROCESS OF BEING HEATED.

form collectively the floor or platform over which the performers are presently to walk. It may be noted here that the heat is sufficiently intense to cause the ends of the green poles to burst into flame.

The creeper and the poles were then discarded and the bundles of *Dracaena* placed at short intervals round the outside circumference of the oven, all the operators crouching down, each beside one of the bundles (Fig. 5). The fern-tree log was then adjusted in its position diametrically across the edge of the oven so that the root end pointed in a certain direction. One of the operators then shouted out "A vutu!" and from the direction in which was pointed the root end of the log appeared eight fresh performers including one woman, all dressed similarly to the operators. Immediately before the first performer reached the edge of the oven, the fern-tree log was thrown on one side out of the way of the performers. A period of 20 minutes had elapsed up to this point from the time when the first ember was taken off the stones. All the performers stepped briskly up to the oven and proceeded to walk in single file deliberately over the stones. The irregularity in the shape of the individual stones and of the surface of the layer of stones in the oven called for a firm tread, and the performers had to take a grip of the stones with their feet and to use their arms in order to maintain their balance (Fig. 6). They walked once completely round on the stones, following the circumference of the oven in an anti-clockwise direction, and then stepped outside. In former times the walk was done three or four times round the oven.

All the operators and the performers then immediately heaped the bundles of Dracaena on to the

stones and covered the whole with leaves and threw back the earth from round the outside of the oven. They then sat down on the top of the oven, which was now giving out large clouds of smoke from the green leaves being

LEVERING THE HEATED STONES FROM THE TOWARDS THE PERIPHERY.

heated on the stones.

The oven was then to be left for four days, without being touched, this being the period necessary to cook the Dracaena roots.

The feet of the performers, on being examined afterwards, exhibited no sign whatever of being scorched or burnt by contact with the hot stones.

Only Dracaena roots used in this type of oven .- Only Dracaena roots are baked in the oven, over the stones of which the performers walk. Native opinion has it that if any other kind of food be put into this particular

oven it will not be cooked, but, on being taken out of the oven after the prescribed period, will be found to be raw, in fact, in precisely the same condition as when it was placed in the oven.

Ovens of the type described, but in which any kind of stones serve as the medium for heating and so baking the food placed on them, and where no fire-walk is performed, are used for cooking other kinds of food more commonly consumed, e.g., yams, taro, and other vegetables, pig flesh, cattle flesh, fowls, fish, turtle. Cooking vessels of pottery are also used for preparing foods in districts where such vessels are made or can be obtained by exchange. Food cooked in pottery vessels offers a different taste from food prepared in the iron utensils which are now gradually replacing the nativemade pot.

Period of four days.—The period stated during which the Dracaena roots are left in the oven to be baked, viz., four days (mbongi va = literally 'four nights'), is the same as the period required in many other Fijian customs for effecting some purpose. The following instances have been collected from among the mountaineers on Viti Levu.

- (i) After circumcision (thili) a boy is allowed four days for the wound to heal.
- (ii) On being tatued a girl rests in the house for four days.
- (iii) At the physical consummation of their marriage



SHOWING THE OPERATORS PULLING ON THE ENDS OF THE POLES.

a newly married couple are shut up together for four days in their new house built for them.

(iv) When given certain native medicines a sick person will wait for four days so that its effect may be observed.

Sexual abstinence.—The performers who walk over the stones are required to refrain from sexual

intercourse, whether legitimate or otherwise, prior to the occasion of the fire-walk. A performer who has not observed this precaution will be burnt by the stones although his burns can be relieved

if the chief of the group strokes (yamotha) the soles of the feet of the sufferer. This rule of sexual abstinence is found in other Fijian customs as a necessary preparation for the performance of those customs. Thus, in the provinces of Ra and Mbua, where it is a duty of the women to make pots, they must, prior to making their pots, observe this rule; otherwise the pots will not set properly, but will crack on drying, rendering them useless. The rule applies in this instance also to any person present while the pottery is in course of manufacture. Again, women of the mountain

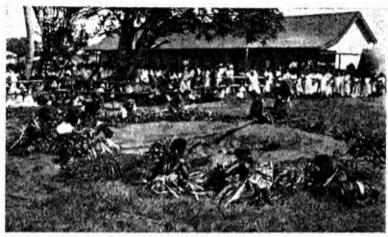


Fig. 5. READY FOR THE CEREMONY. NOTE THE FERN-TREE LOG ALONG WHICH THE SPIRITS PRECEDE THE PERFORMERS.

areas of Viti Levu make the black (loaloa) for the dye for bark-cloth by burning a certain kind of resin, and if they do not observe sexual abstinence before preparing their loaloa, it will not form. A similar rule applies in the making of salt in the Ra province; and elsewhere in preparing oil, in fishing, and in cutting up the leaves used in making mats.

Analysis of stone used.—An analysis of the stone used in the fire-walk has revealed that it is an augite andesite having a feeble conductivity and very slow rate of radiation, and these facts have been put forward in an attempt to show that the stones may have a comparatively cool surface although

their interior is intensely hot.1



Fig. 6. THE FIRE-WALK; THE SECOND FIGURE IS A WOMAN.

The legend.—The following is the version of the legend as it was related to me, and it explains the origin of the privilege of immunity to being burnt, held by the Sawau group when performing the firewalk.

In times long ago the people of Sawau were wont to fore-gather in the evening at a house named Nakauema for the purpose of story-telling, and it was their custom for each listener to present the story-teller with some reward (nambu), the rewards being named one by one before the story began. On a certain evening a story-teller

named Ndrendre was to tell his tale. One of the listeners said he would bring as his reward a coconut, another some bananas, and so on; and one man named Tui Nggalita promised that whatever he might meet on his way the next morning (solokaya) he would bring as his

¹ Transactions and Proceedings of the New Zealand Institute. Vol. XXXV. 1902. pp. 187-201.

nambu to the story-teller. Then Ndrendre proceeded with his story and every one went to bed. And the next morning they all set off to fulfil their promises. And Tui Nggalita decided he would catch an eel (nduna in Mbenggan dialect; mbonu in Mbauan dialect) that he had seen at a certain place called Namoliwai. So he dug deep into the ground to get his eel. Now that place was the abode of spirits,2 but Tui Nggalita did not know this. And the spirits thought to frighten him away, and so thrust before him some sticks that had been used for purposes of personal cleanliness, but he feared not and continued with his work. When at last he reached down to where all the spirits were he found their chief, Tui Namoliwai, standing at the entrance to their abode as if protecting all his followers, who were inside and behind him. Then Tui Nggalita took hold of Tui Namoliwai and said he should be his reward for the story-telling the night before. But Tui Namoliwai pleaded hard for his release. He offered to make his captor exceeding rich if only he would spare his life. But Tui Nggalita was firm and turned the offer down. Then Tui Namoliwai promised to make him always first in the reed-throwing contests. But this offer also was refused. Then Tui Namoliwai said that Tui Nggalita's canoe should be wanggavunindrou, i.e., outstrip all other canoes in speed; but Tui Nggalita refused this, too, for he was a high chief having already many possessions and was skilful with the reed and the sail. Then Tui Namoliwai offered to give Tui Nggalita and all his descendants for ever the power to be buried in a Dracaena-root oven for four days and yet come out again whole and alive. To this proposal Tui Nggalita gave his consent, but he suggested that the privilege be simply to walk through the oven, as he considered it wise not to have himself buried entirely lest someone might come along during the four days and perhaps spear him and then he would be in trouble (lengga). And it was agreed that Tui Namoliwai be released and that Tui Nggalita and his descendants have the privilege described. And so on the next occasion when the Dracaena oven was prepared and the hot stones were all ready for the roots to be thrown into the oven, Tui Nggalita walked over the hot stones and came to no harm. And that is how the fire-walk began.

Protection by spirits.—In the description of the fire-walk it was stated that the fern-tree log is so placed across the oven that its root end is pointing in the direction from which the performers approach the oven. If the log is placed in any other way than as described, the fire-walk will be a failure, because along this log and into the oven and on to the stones the performers are preceded by Tui Namoliwai and his attendant spirits who are present in order to see the performers safely through their act. On each member of Tui Namoliwai's party devolves a duty (era vakaitavi kethenga na tevoro). First there is Tui Namoliwai himself. He is their chief and decides all things concerning them. Then there is Kumbou (= 'smoke'). It is his share of work to be omnipresent in all the smokes that appear anywhere in Fiji. No matter what the smoke is caused by he must be present in case the smoke should be coming from a fire in a Dracaena oven where the fire-walk is to be performed (nde lovo). There are also Nggilaiso (= 'charcoal') and Yameyame (= 'tongue of fire'). These two must be present and among the operators who clear the embers off the hot stones so that the men will not get burnt. There is also another whose name and function I was unable to ascertain. He was deaf and rather liable to spoil the ceremony because he did not hear about it until it was nearly too late.

An important point regarding the position of the log across the oven is that no one may cross an imaginary line joining the root end of the log and the place from which the performers emerge, for if he does so he will surely be smitten with some terrible disease or accident and pay for his folly with his life.

Rewards for services rendered.—The legend mentioned that presents were made to the story-teller by way of reward for his entertainment. The matter of giving rewards for services rendered is of

² Luveniwai (= 'water child' or 'water baby') was the Fijian word used and which has been translated here as 'spirits,' and these luveniwai were described as being a kind of tevoro. A. B. Brewster in The Hill Tribes of Fiji states that luveniwai had the meaning of fauns or woodland fairies and that he never heard

that they were malignant; "on the contrary they seemed friendly little-folk" (p. 225). "It was believed that the miscarriages of ladies of rank became sprites or water babies, and were the origin of the cult" (p. 224). Tevoro is the Fijianized equivalent of the English word devil.

common occurrence among the Fijians. One group may invite another in a neighbouring district to assist in providing food or property or to perform a dance on the occasion of a large meeting, and such services would be returned with interest at a subsequent date to be mutually arranged. If the people of a given village build a house for a chief, it is his duty to reward them with property (e.g., whales' teeth, bark-cloth, mats) and to feed them. Although European influence is causing most Fijian customs to be disregarded or forgotten and native property such as bark-cloth and mats to become more precious through their being manufactured to a less extent than formerly, the custom of presenting food by way of reward is still performed, and the food must be sufficient not only fully to satisfy the appetites of these hard-working guests, but also to allow of generous quantities being taken away to their homes on completion of their task.

Part of the information recorded above was obtained from a young chief of the island of Mbengga, and in this connection it may be mentioned that I have the impression that the chiefs are more interested than commoners in the customs of their forefathers. Generally speaking, the young men are now ignorant of, or care nothing for, these early customs, and it would appear that the time is not far distant when the local educational authorities will feel it incumbent on them to include in their

curriculum for Fijian schools periods to be devoted to instruction in native lore.

KINGSLEY ROTH.

S. Africa: Archæology.

Goodwin.

South African Raised Beaches. By A. J. H. Goodwin, University, Cape Town.

Recent excavations carried out by Mr. B. Malan and myself show that the Cape St. Blaize
Cave at Mossel Bay contains stratified deposits showing Mossel Bay types to be previous to the
midden deposit. Earlier work at this cave was described by George Leith (J.R.A.I., Vol. I N.S.
(Vol. XXVIII O.S.), 1899), but no stratification was noted. The Mossel Bay Variation seems to be
divisible into two horizons, but no change is discernible between the sizes, techniques, etc., of the two.
Between them, however, more or less dividing them, is a slight intrusion of Howieson's Poort types.
This find links up this cave with that excavated by Mr. B. Peers at Fish Hoek, at which the Howieson's
Poort intrudes into the Still Bay. We may suggest, therefore, that the Mossel Bay Variation and the
Still Bay Culture are partly synchronous.

Perhaps more important evidence was obtained from the raised beach below the cave. The beach was shown to be the result of a maximum uplift of 29 feet, correlating it with the series of 20-foot raised beaches along the South African shores, and dissociating it completely from the 60-foot beach. Contained in the beach material were also found, after considerable search, Mossel Bay types of implement. This confirms the find made by Rogers ('Geological Survey of the Cape of Good Hope,' tenth report) in the raised beach of Little Brak. We are now in a position to affirm that the Mossel Bay industry existed previous to the 29-foot uplift. This should give us a valuable datum line for South African prehistory, but unhappily the exact age of the 20-foot beach level is unknown to geologists.

A. J. H. GOODWIN.

ROYAL ANTHROPOLOGICAL INSTITUTE: MEETINGS.

Ordinary Meetings of the Institute.

Shape-Shifting Foxes in China. Summary of a Communication presented by Professor R. D. Jameson.

7 February, 1933.

Opinions about shape-shifting foxes in China record themselves in overt behaviour and in innumerable anecdotes. Under certain circumstances foxes are supposed to change their shape and assume that of human beings. When they are in human form they can be distinguished from human beings only by an occult science. When a fox in human form is intoxicated or killed, it resumes its fox shape. Foxes may also assume other shapes if they have acquired a sufficient 'virtue'; and finally by shrewd and frequently ruthless discipline foxes, like human beings, have been known to make themselves immortal.

The overt actions take the form of (1) religious cults, and (2) demoniacal possession.

- (1) Religious Cults.—Fox worship is widespread in North China, and most farmsteads have a small fox shrine which may or may not be used for active worship at any given moment. The worship appears to be incidental to the kind of luck the farmer is having. If he is having bad luck, he pacifies the fox, and if he is having very good luck he may offer worship in the hope that the luck will continue. Others keep the shrine clean and offer small sacrifices at irregular intervals. Fox worship is officially recognized by the Taoist cult, wherein a particular officer, the Fah Kuan, who is also the official exorcist, is charged with keeping order among the foxes who, though they have the powers of gods, frequently misbehave themselves. The protecting divinity of the cult is the Goddess of Tai Shan; the avenging deity is the Thunder God.
- (2) Demoniacal Possession is a psychopathic condition not infrequent amongst those who have opinions about shape-shifting foxes. At times possession shows characteristic paranoiad symptoms, but more frequently it appears to be a milder psychosis. In addition, many individuals, both men and women, gain a livelihood by telling fortunes and giving advice through a fox 'guide.'

The anecdotes about foxes illustrate variations of opinion which a study of the overt forms of behaviour do not make clear. Of the more than three thousand variants in my collection, I have chosen a few to illustrate the spread, the enchainment, and the force of these opinions.

(1) A large group of stories deals with fox activities and character. When living in human form, foxes are sometimes visible and sometimes invisible. Generally they behave well, although they have an unfortunate weakness for throwing tiles at intruders and for drinking strong spirits.

(2) A second group of stories tells about foxes who reward their friends. Frequently the reward is for having saved the fox's life, and may take the form of raising the benefactor to a position of great wealth and power in the community. Other rewards are for small acts of friendship which were sometimes performed unconsciously.

(3) A third group tells of fox revenge or fox retribution. The revenge is frequently for having attempted to kill or maim the fox. The retribution may be for minor inconveniences. Foxes are particularly sensitive about good manners. Any human being who insults a fox or uses bad language towards it may expect rapid and humiliating punishment. Finally, foxes frequently humiliate those human friends who attempt to gain profit from friendship.

(4) A large number of stories are apothegmatic and describe the fox as interfering in human

affairs either to correct injustice or to illustrate a moral lesson.

It is notable that many of the rewards and punishments appear to be out of proportion to the acts of kindness or offence. These stories provide a rich field for the study of popular as well as comparative ethics.

(5) Tales about the crotic fox are perhaps more important and widespread than any others except those dealing with general fox behaviour. They present us with a complete theory of the fox character. The power to shift shape may be acquired in one of two ways:

(a) First, the practice of virtue, which involves the reading of the classics, various exercises,

physical and mental, and the adherence to a rigid moral code.

(b) The second method of attaining power is erotic. Each living creature is supposed to possess a quantum of life substance. In the course of living, this quantum is slowly dissipated. Small amounts are lost with every breath, and the fox maiden who absorbs your breath assimilates a quantum of life substance [cf. vampirism]. Large amounts of life substance are lost during sexual intercourse, at the moment of orgasm. Foxes who become the lovers of human beings usually do so for the purpose of stealing human life substance by artful methods in coitus reservatus (incubus and succubus). Although all fox lovers, wives or husbands, are probably living with human beings for selfish purposes, occasions do arise when a fox mates with a human being for other reasons. The most important of these is 'destiny' when the love is fated, or when the fox and human being were in some previous existence in a relation cut short by accident. Finally, foxes sometimes become the companions of human beings as a reward for kindness or in an attempt on the part of the fox to save its life by association with an individual who is known to be virtuous and therefore able to protect the fox against its eternal enemy the God of Thunder.

PROCEEDINGS OF SOCIETIES.

THIRD INTERNATIONAL CONGRESS OF EUGENICS, 21-23 AUGUST, 1932.

The Third International Congress of Eugenics was held at the American Museum of Natural History, New York, on 21–23 August, 1932, and was attended by a large number of delegates, including many from European countries, under the presidency of Dr. C. B. Davenport. General discussions took place on such subjects as immigration control, measures to encourage the fertility of the gifted (main paper by Dr. J. Sanders of Rotterdam), reduction in fecundity of the socially inadequate (introductory paper by the late Sir Bernard Mallet), eugenics and education, marriage advice, and eugenics and war. At an evening session Dr. Fairfield Osborn presented an address on birth selection vs. birth control.

The afternoon sessions were divided into six sections, at which numerous papers were presented. These were grouped under the topics (1) race differences and their measurement, (2) mate selection, birth rate and fecundity, (3) the socially inadequate, (4) the physiology of reproduction, (5) society in relation to eugenics, (6) genetical.

A number of the papers had direct or indirect

anthropological bearings. The delegate of the Royal Anthropological Institute, Dr. R. Ruggles Gates, F.R.S., presented an account of the plan for obtaining an international standard technique in physical anthropology.

The suggestion for standardization of methods arose in connection with the meeting of the International Federation of Eugenic Organizations at Hinton St. Mary in 1930. This led to the appointment of a Committee of the Institute, with Miss M. L. Tildesley as Secretary, which drew up preliminary proposals (Man, 1932, 193, 201) regarding the fields to be covered and suggested that the anthropologists of each country interested should form a committee to arrive at uniformity of opinion through discussion, these results to be later correlated by the formation of an international committee. This plan created much interest, and although there are many difficulties to be overcome, the needs and the advantages of such standardization

uniformity can in this way be made simultaneously in all countries. Professor F. Frassetto also made suggestions for standardization especially in methods

are so great that it is hoped that progress towards

of statistical treatment.

OBITUARY.

Salomon Reinach: born 29 August, 1859: died 4 November, 1932.

Monsieur Salomon Reinach, Member of the Institute, Conservator of the Museum of National Antiquities at Saint-Germain, and Professor at the École du Louvre, died on 4 November, 1932, at the age of 74, after a short illness, in full mental vigour and in full work. In him passes away a savant and an archæologist of world-wide reputation.

Born 29 August, 1859, he entered the École Normale in 1876, and became a member of the École Française at Athens in 1879. His fine intellect, prodigious memory, and exceptional capacity for work made it easy for him to attain all the scientific distinctions he could desire. He was an Honorary Fellow of the Society of Antiquaries of London, and an Honorary Doctor of Letters in the University of Oxford. From 1903 onwards he was an Honorary Fellow of the Royal

Anthropological Institute.

Salomon Reinach enjoyed a world-wide reputation, though in some of the fields of his tircless activity he challenged the theories and criticisms of others. In the history of religion, especially, his book 'Orpheus' provoked controversy of unusual vehemence. As a writer, his output was remarkable. The bibliography of his articles in a great variety of archæological and historical journals—of which he edited several himself—fills a pamphlet of a hundred pages. His 'Manuel de philologie 'classique,' 'Traité d'épigraphie grecque,' 'Gram- 'maire latine,' 'Répertoire de la statuaire grecque 'et romaine,' 'des peintures du Moyen-âge,' his

'Catalogues du Musée de Saint-Germain,' and many others, have become indispensable equipment of the archæologist, the historian, the scholar, as well as the lover of art. The reading public, too, loved this highly cultivated man of learning who, in many books deliberately popular, had the art of enlivening the most difficult problems of archæology, of the history of art, and of prehistoric times. Several of his books attained a number of editions usually only reached by literary works.

The counterpart to Reinach's literary activity was his teaching at the École du Louvre, where the lecture rooms were too small to hold the audiences which crowded to attend his courses on

ancient, mediæval, and renaissance art.

Yet this man of encyclopædic culture and prodigious learning chose sometimes to struggle against wind and tide, and in the heat of argument went occasionally so far as to deny the very facts. His inexhaustible knowledge, imagination, and wit never failed him for arguments to confront his opponent and keep the controversy going.

Unluckily there was the Glozel affair to cloud the close of this brilliant scientific career. Reinach loved original and revolutionary ideas, and ran a peculiar risk of such an accident. Having fought from the first moment myself in the ranks of those who were exposing the Glozel forgeries, I think I have the right to say that no critic of Glozel can forget that in Salomon Reinach he had to do with an opponent of great ability, who compelled respect by his learning, his output, and his keenness. It is no less certain that about Glozel Reinach was wrong; and it was unfortunate that this mistake,

advertised through the world by bitter controversy, gave occasion to the noisiest of quacks to jeer at

a man of such learning and industry.

At the grave of Salomon Reinach the archæologists of the world—and not least his opponents—do homage to his immense knowledge and the tireless energy of a lifetime devoted to the service of science.

CLAUDE F. A. SCHAEFFER.

Canon John Roscoe: born 25 October, 1861: died __ 2 December, 1932.

Roscoe of Liverpool, was trained to be a civil engineer, but he felt the call for mission work in Africa and was trained at the Church Missionary Society's College at Islington. He went to Mamboya, then part of British East Africa, in 1884 and was invalided home for sunstroke in 1889. He joined the Uganda Mission in 1891: in those days it took some three months to walk from Sadaani, on the coast opposite to Zanzibar, to reach the southern shore of Lake Victoria, and twelve days to cross the lake in canoes, a distance of 200 miles.

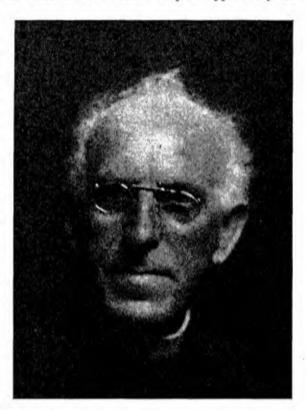
The famous and astute Mutesa, the king of Buganda,¹ died in 1884, and his son, the weak Mwanga, was unable to cope with the rivalries between the Lubare priests, the Arabs, and the Christians. Although Mutesa allowed the early missionaries to teach, he closely restricted their movements, but in spite of this, owing to the eagerness of the Baganda for instruction and the devotion of the missionaries, the spread of education and Christianity was phenomenal. Throughout the persecutions, confusion and jealousies that hampered missionary work during Mwanga's reign, Roscoe played his part in the education of the natives, including Mwanga himself, through the medium of Swahili. The situation was further complicated by the antagonism that arose between the Protestants and Roman Catholics, the main reason for which was more political than religious.

In June, 1893, the first mutiny of the Sudanese troops took place, and Capt. N. S. Macdonald, who was then in charge at Kampala, considered that " the wisest and safest course and the one most " likely to avoid bloodshed was for all Europeans to come to the Fort . . . the success of the rebels would endanger the lives of all Europeans, and I " thought the soundest plan was for all the latter to " assemble in the Fort and show that we Europeans " meant to stand together in the common danger. At the same time I told you if you preferred flight, you were at liberty to flee. You very wisely took my advice and assisted me most loyally and to " the moral effect of this I attribute in great measure " the successful result . . . Your action contri-" buted to the successful and comparatively blood-" less result, and has been warmly acknowledged by "Sir Gerald Portal." The French missionaries fled to Bukoba. The conduct of the English

missionaries in mixing themselves up with military

operations was criticized at home as the local conditions were not fully appreciated.

It was in this year that Roscoe was ordained in Buganda, and in 1899 he was appointed Principal of the Theological School at Mengo, the capital of Buganda, which post he held for ten years. After having served for twenty-five strenuous years as a missionary, and being then in ill-health, he thought it wise to retire as he wanted to avoid a complete breakdown. He needed a quiet opportunity to



garner the results of his investigations and desired to interest people at home in the wider aspects of missionary work, with which he was always in full sympathy. No one who knew him could doubt his firm faith in the value of missionary enterprise, and it was equally evident that his training as a civil engineer and his anthropological studies had given him a broad outlook.

Roscoe returned to England in 1909, and in the following year the University of Cambridge conferred on him an honorary M.A. degree in acknowledgment of his contributions to the ethnography of Uganda. He became a curate at Holy Trinity Church, Cambridge, and gave lectures in the Anthropological Department of the University. In 1912 he was presented by the University to the Rectory of Ovington, near Thetford in Norfolk, a

¹N.B.—Buganda, the territory of the king of the Baganda. Uganda, the Protectorate, including Buganda and other kingdoms.

parish with a small population and but moderate endowment. Here he lived in friendly relations with all his neighbours whatever their respective religious views might be, and he was as concerned with the spiritual life, economics, and habits of his parishioners as he had been in those of the Baganda. In 1922 he was appointed Honorary Canon of Norwich.

Sir James Frazer had long wished Roscoe to make further ethnographical studies in Uganda, and it was owing to his efforts that Sir Peter Mackie, of Glenreasdell, became interested in the project and most generously handed over to the Royal Society ample funds for the purpose, which were administered by a special committee. Roscoe left England in June, 1919, and the valuable results of this long and for him arduous expedition were published in four volumes (1922-1924).

In 1923 the Vice-Chancellor of the University of Cambridge appointed Roscoe to deliver the second Frazer Lecture in Social Anthropology. In diverse places, through a period of many years, Roscoe gave lectures on African ethnology and primitive religions, and by these he was enabled to influence a large number of students and others and to encourage

them to further study. Roscoe was proud to call himself a disciple of Sir James Frazer, to whose inspiration he owed his first love for anthropology. For many years he received encouragement and advice from Sir James, who even took the trouble to read through the proofs of Roscoe's books and make valuable criticisms. influence of Frazer upon Roscoe is evident in all the

publications of the latter. No sooner was 'The Baganda' published than it was warmly received and acknowledged as authoritative. Roscoe had resided for a long time in Buganda and his kindly sympathetic nature enabled him to acquire an intimate knowledge of the people. His main object was to give an account of the social and religious life of the Baganda in the old days before their country came under European influence. This decided him to end his investigations with the early years of Mutesa's reign, because Mutesa admitted Arab traders into Buganda and also received the first missionaries. Changes were introduced in quick succession during the later years of his life, especially in matters of land tenure and methods of warfare, even before religious questions came upon the native horizon. None of the Baganda who gave Roscoe information about their early institutions knew English, nor had they come into contact with Englishmen. Thus he was in a position to record the genuine old customs and beliefs, and in doing this he received invaluable assistance from Sir Apolo Kagwa, K.C.M.G., the then Prime Minister and a Regent of the infant King of Buganda. The information was collected from old men thirty years ago and it would now be impossible to obtain it, but with this as a basis an interesting study could be made of the effects of culture contact.

This was the first full study of an African tribe; The Life of a South African Tribe ' (the Thonga), by H. A. Junod, appeared in 1912, and the other great monograph 'The Ila-speaking Peoples of 'Northern Rhodesia,' by E. W. Smith and A. M. Dale was published in 1920. These authors dealt with conditions then existing, but Roscoe also resuscitated the past. When everything is taken into consideration, the writing of 'The Baganda' must be considered as a great achievement.

No one who had not the long experience of the country and of the peoples and their languages and had not gained their confidence as Roscoe had could have accumulated in so short a time the varied information retailed in the volumes that were the result of the 1919-20 expedition. It is characteristic of Roscoe's enthusiasm that he wanted to make a final expedition to the north-east region of Uganda, but it was then too late, as his health and strength

could not have borne the strain.

Roscoe was elected a Fellow of the Royal Anthropological Institute in 1912. Apart from intrinsic interest of his anthropological investigations and their addition to scientific knowledge, Roscoe always hoped that they would prove of value to missionaries and govern-ment officials, but he was in advance of the times. In most cases the missionaries failed to appreciate how such information could be of any use to them; perhaps if Roscoe had pointed out more distinctly how these studies bore upon the problems missionaries had to face they might have been more sympathetic with this aspect of his life's work.

It is only fitting that acknowledgment should be made of the devotion of Mrs. Roscoe, who shared in the very real hardships and dangers incurred during the early days. Too frequently the part played by a man is apt to eclipse the patient and unobtrusive sphere of a wife, without whom the husband might not have been able to do all that he has accomplished.

Mrs. Roscoe and a daughter (Mrs. Little) and a son survive to cherish the memory of a good man. A. C. HADDON.

PUBLICATIONS.

Notes on the Manners and Customs of the Baganda.

(J.A.I., XXXI, 1901, pp. 117-130.)

Further Notes on the Manners and Customs of the

Baganda. (J.A.I., XXXII, 1902, pp. 25-80, 1 Fig. and Pls. I, II (Genealogy of the Royal Family).)

The Bahima: a Cow Tribe of Enkole in the Uganda Protectorate. (J.R.A.I., XXXVII, 1907, pp. 93-118, Pls. XV, XVI.)

Kibuka, the War God of the Baganda. (MAN, 1907, 95.)

Nantaba, the Female Fetich of the King of Uganda. (MAN, 1908, 74.)

Notes on the Bageshu. (J.R.A.I., XXXIX, 1909, pp. 181-195.)

Python Worship in Uganda. (MAN, 1909, 57.) Brief Notes on the Bakene. (MAN, 1909, 70.)

The Baganda: An Account of their Native Customs and Beliefs. (London: Macmillan & Co., 1911, pp. i-xix, 1-547, 81 Figs. (Anthropometric Tables, pp. 493-522).)

The Northern Bantu: An Account of some Central African Tribes of the Uganda Protectorate. (Cambridge: University Press, 1915, pp. i-xii, 1-305, Pls. I-XXII, and a map.)

Twenty-five Years in East Africa. (Cambridge: University Press, 1921, pp. i-xvi, 1-288, Pls. I-XIX, and a map.)

Uganda and some of its Problems. (Journal of the African Society, XXII, 1923, pp. 96-108, 218-225.

The Soul of Central Africa: A General Account of the Mackie Ethnological Expedition. (London:

Cassell & Co., 1922, pp. i-xvi, 1-336, 106 plates.)

The Bakitara or Banyoro: The First Part of the Mackie Ethnological Expedition to Central Africa. (Cambridge: University Press, 1923, pp. i-xvi, 1-370, 42 plates, a map and a plan.)

The Banyankole: the Second Part of the Report of the Mackie Ethnological Expedition to Central Africa. (Cambridge: University Press, 1923, pp. 1-xii, 1-176, 31 plates, and a map.)

The Bayesu and other Tribes of the Uganda Protectorate: The Third Part of the Report of the Mackie Ethnological Expedition to Central Africa. (Cambridge: University Press, 1924, pp. i-xiii, 1-205, 32 plates, and a map.)

Immigrants and their Influence in the Lake Region of Central Africa: The Frazer Lecture on Social Anthropology, 1923. (Cambridge: University Press, 1924, 31 pp. Reprinted in The Frazer Lectures, 1922–1932. Edited by Warren R. Dawson. London: Macmillan & Co., 1932, pp. 25–46.)

George Reginald Carline: born 15 March, 1885: died __ 24 December, 1932.

Mr. George Reginald Carline, Keeper of the Bankfield Museum, Halifax, who died on 24 December, 1932, at the age of forty-seven. had done good educational work for anthropology, and would have done much more had he lived. Educated at Repton and Exeter College, Oxford, where he later took his diploma in anthropology, he became a fellow of the Royal Anthropological Institute in 1912. He was Assistant Curator, first at the Wellcome Historical Medical Museum, and later at the Pitt Rivers Museum, Oxford. He was appointed Keeper of the Bankfield Museum in 1924, succeeding the late Mr. H. Ling Roth. The son and brother of artists, his guiding motive was to give an æsthetic unity to the galleries in his charge while retaining their educational and scientific value, and he replanned the whole collection, which was of very varying types and values, with this end in view. He enlarged and re-arranged the textile room, and the arrangement of the new ethnographical room, which embodied his ideas, is both scientific and practical, and asthetically satisfactory.

His health permitted little field work, but he spent the season of 1925 excavating for Sir Flinders Petrie in the Fayum; after the British Association meeting of 1929 he was some time in Northern Rhodesia with the Mambwe tribe and later with the Kavirondo tribe of the Lake Victoria region; and for the study of peasant art he visited at different times Scandinavia, Central Europe and the Balkans, and all these travels enriched the Bankfield Museum. He did much useful work, but his memory will remain above all as that of the kindliest and most courteous of gentlemen and he will be sadly missed by all who worked with him. H. C. L.

REVIEWS.

AFRICA.

Morphology of the African Bow-Weapon. By Leo Frobenius. Translated from the German by Blanche Lommel. 48 pp., 26 charts. Walter de Gruyter & Co. Berlin, 1932.

Maps clearly indicating the geographical range of special appliances and of their varieties are always to be welcomed by ethnologists, and the eighty-three distribution-charts, which form the most important part of this work, should prove very helpful. They represent results arrived at during forty years' study of the archers' bows of Africa and of their accessories. Dr. Frobenius has certainly shown great energy and perseverance in collecting together, from his own observations, from museum collections and from the literature, a very extensive mass of facts upon which his maps are based, and he has given much thought to the task of classifying his material in considerable detail. The whole idea of the thesis is excellent.

Unfortunately, the practical utility of the work is greatly impaired by many serious blemishes. On reading the introductory remarks, one wonders why the author should apologize so profusely and profoundly for the imperfections of his text and for his unfittedness for his self-imposed task. But it must reluctantly be admitted that the self-depreciation is not unwarranted. The text is very far from satisfactory, and calls for many emendations. It is difficult to apportion the blame equitably between the author and the translator,

but one feels that most of the blemishes could have been eliminated by the exercise of greater care and more critical inquiry. The translator is evidently unacquainted with the ordinary English terminology applied to the bow and to archery, and the text is thereby rendered stilted, confused and irritating to read, and it is, moreover, sometimes difficult to discern the author's meaning and to follow his argument. These difficulties might, no doubt, be surmounted in a second edition by copious and severe editing. But the editor would need to cope with several of the author's state-ments, descriptions and deductions. The remarks made in reference to 'composite' bows cause one to wonder whether Dr. Frobenius has ever examined carefully any examples of these, or even read the descriptions of them in any of the works whose titles he quotes. Such a statement as the following suggests the contrary—"Before the bow is strung these strips of horn and " bundles of sinew lie toward the inner side of the "oval." Does he really think that the horn layer, as well as the sinew 'backing,' is applied to the 'back' of the bow? After his description of composite bows as he, but, it is to be hoped, no one else visualizes them, the author proceeds with, no doubt, well-meant advice to investigators on matters long since dealt with by them, and ends his paragraph with an argument the drift of which is not easily discernable.

It is a pity that Dr. Frobenius did not collaborate more with serious students of the bow, as, had he done so, he might have produced a really valuable treatise. The great labour of compiling so much material deserves more careful presentation of the results. As it stands, the treatise contains many interesting suggestions in the text; the various features of the bow are dealt with one by one, often with diagnostic skill, and the numerous maps are an important and welcome feature. The illustrations are very numerous and, for the most part, well drawn, but many are so much reduced as to lose their illustrative value. The maps are inartistically overweighted by their heavily printed titles, and a somewhat ponderous style mars the text and frequently confuses the argument. We must hope that, after drastic revision, there may be issued a new edition, translated with due regard to normal English terminology and idiom. Such an edition should prove of real service to ethnologists and others. A very important and helpful improvement which may be suggested would be the addition of an appendix giving the precise location of the various tribes and place-names mentioned in the A welcome awaits an edition which will justify the elimination of the apologetic foreword with its sinister heading, 'The imperfection of this treatise.' HENRY BALFOUR.

Report on the Fisheries of Uganda. By Worthington, M.A., Ph.D. Published by Crown Agents for the Colonies, 1932. Price 7s. 6d. By E. B.

In addition to the great inland seas, Victoria and Albert, on its borders, Uganda is dotted about with a considerable number of smaller lakes which are of much interest and often of great beauty.

A few years ago the Colonial authorities wisely decided

to embark on a biological survey of the East African lakes mainly on account of the food supply which the indigenous fish provide for the inhabitants of the regions in which they The survey of Lake Victoria was conducted by Mr. Michael Graham, that of Lake Albert by Dr. Worthington and the present report refers to the smaller lakes. This section of the research was carried out by Dr. Worthington, assisted by Mr. Beadle as Chemist and Zoologist, Mrs. Worthington, who was topographical surveyor, and Mr. Fuchs, who studied the Geology. The results now before us fully justify the undertaking, and the report contains a mass of information of great scientific value.

It will probably have a greater appeal to zoologists and biologists than to anthropologists, but the latter will find careful descriptions of the fishing methods of the natives who live on the borders of the lakes, a cultural matter upon which information is often scanty.

The position which lake fish occupy in the food supply of the tribes is a matter of considerable importance not to be overlooked by those interested in native dietetics for after being split open and dried the fish becomes an article of trade; it is transported for many miles and thus furnishes large numbers of natives with a supply of protein which they would otherwise lack.

Dr. Worthington pertinently points out the necessity for improving the quality of this food, and he also studied the best methods of conserving the supply of fish for the future needs of the people, for obviously the territory has in its waters a national asset of great value to its inhabitants.

The report is well produced and maps of the various lakes are appended.

CORRESPONDENCE.

Perforated Spear-heads from Uganda. (Cf. MAN,

1933, 29.) Sir,-In his description of the iron spearheads from the shrine at Luzira, Uganda, Mr. H. J. Braunholtz suggests that the "eyelet" between blade and socket "was "no doubt for riveting to the shaft." I have not seen these specimens, but the photograph (Fig. 8) does not suggest rivet-holes. The position of the holes, immediately below the blade, and the slight expansion of the iron around them appear to me to indicate that these holes were punched through solid metal, i.e., beyond the hollow of the sockets in both It would be unusual in African spears to instances. have the socket cavity (formed by hammering the flat iron base into tapering tubular form) extending right up to the base of the blade. Moreover, in the upper figure, there is what appears to be a rivet-hole close to the lower end of the socket, in a far more appropriate and usual position, that is. Is it not probable that the holes near the bases of the blades were intended for attachment of a 'retrieving-line' to the javelin? In view of the frequent and varied use made of retrieving-lines in In view of the Africa, I venture to make this suggestion. I would add that, even if the socket-hollow admits of the tip of the shaft reaching beyond the hole, there could hardly be enough substance at this extreme end of the tapering shaft to admit of a somewhat substantial rivet, such as the size HENRY BALFOUR. of the hole would demand.

Archæological Discoveries at Luzira. (Cf. MAN.

1933, 29.) Srr,—I regret that in my note on the iron spear-heads, illustrated in Fig. 8, I suggested that the eyelets on two of them were "for riveting

"to the shaft." Further examination has convinced me that this is impossible, since the sockets terminated below the eyelets, which, as Mr. Balfour points out, are punched through solid metal. The eyelets might, however, have had the purpose of taking a lashing, passing through them and securing the heads to the upper ends of the shafts. Lashings of this kind occur in a few spears from the Mobangi and Wangata tribes of the Belgian Congo, the latter being described as fishing spears. But it is not clear whether they have eyelets. (Cf. J. Marquart and J. D. E. Schmeltz, 'Ethnographisch 'Album van het Stroomgebied van den Congo,' Publ. Rijks Ethn. Mus., Ser. II, No. 2, Pl. 138, Fig. 3, and Pl. 154, Figs. 8 and 10.) The same album illustrates a number of other spears with eyelets of clongated shape between the socket and spear-head, from the Ubangi and Aruwimi rivers; but no cord is shown (Pls. 128, 138, 145, 148, 150, 151). The eyelots in the Luzira specimens differ from these in being circular. They have evidently been punched from both sides, the two punchings not meeting perfectly, and leaving a slight constriction in the centre. H. J. BRAUNHOLTZ.

A Nyasaland Hippo Scare.

SIR,-Villagers on the shores of Lake Nyasa have to face many difficulties in protecting their growing crops. One of the most serious is caused by the inroads of hippopotami from the lake during the night. The photograph shows one of the means adopted to scare away the intruders near Cape Mala, on the east side of the southern part of the lake.

The scare is composed of a hollow cylinder of bark about 5 feet in length, half filled with stones, which are

kept in position by the in-curved edges of the cylinder. One end of this rests in the V-shaped support of two sticks, inclined to each other at an angle of some 70 degrees with the surface of the ground, and tied loosely to the cylinder with bark cord. The other end is tied more securely to a single upright stake. A length of bark cord is attached to the pair of sticks at a height of about 18 inches from the ground, and stretches out on each side for several yards, either on the ground or a few inches above it. The ends of the cord are fastened to tree stumps.

The scare is placed on or close to the path used by



the hippopotami on their way from the lake to the village gardens, so that, when the hippo walks against the cord, the sticks are dislodged and the cylinder of stones falls with such a rattle and roar that the beast, n terror, returns hastily to the lake.

I was shown this particular scare by the late Archdeacon W. P. Johnson whilst accompanying him on one of his tours of inspection of churches and schools.

Apparently this type of scare is unusual. I have not found any mention of it by such competent and skilled observers as the Rev. B. H. Barnes, C.R., and the late Bishop Maples. Nor do I remember any allusion to it by Sir H. H.: Johnston and other writers on Nyasaland. R. WEBB.

The Royal Anthropological Institute is further indebted to Mr. Webb for a series of photographs of native life in East Africa.

Childhood and Totemism (Cf. Man, 1933, 45.)

Sir,—I may perhaps add to Miss Durham's remarks that the belief in the possibility of human beings giving birth to animals existed even among educated people in the eighteenth century. A woman of Godalming, named Mary Toft, in 1726 claimed to have given birth to rabbits. She succeeded in deceiving Dr. John Howard of Guildford, and St. André, the King's Surgeon Anatomist. My ancestor was then Lord Lieutenant of Surrey, and he was desired to take all the evidence on the subject, and the depositions were sworn before him at Clandon or in Guildford. The fraud was eventually unmasked by Sir Richard

Manningham, M.D.

That Mr. Hornblower is right in thinking that hunters look upon animals much in the same way as they do their own kind, I feel sure is true; and it would be peculiar if they did not. Even to-day this is the case; I noticed it when elk hunting in Norway. There you hunt the elk in forests with a dog on a leash. To find your elk you go to where the dog can best get the wind, and there allow him to search. My hunter's name was Alexander, and his dog's Passop. Passop squatted on his haunches and proceeded to quarter the ground with his nose, as a stalker in Scotland does with a glass. From time to time he glanced over his shoulder at Alexander to say there was nothing there. At last he changed. Alexander said 'Elk.' Passop sniffed differ-ently and more intently. At last he was satisfied. He turned round, looked at Alexander and made as though to move forward. He took us straight to the beast.

Another time we were in dense forest, eating our Passop suddenly got up, put his paw on lunch. Alexander's knee and gave the faintest possible whine. Alexander said something to him in a whisper, and after a few moments Passop had located a travelling elk, to which he guided us through the thick forest.

Practically, Alexander and his dog carried on conversation, and as the skill and cunning on these occasions. is with the dog and not the man, it is but little wonderthat early man saw but little difference between himself and his dog.

May not this superiority of the dog over man in the business of hunting be at the base of all the legends of

Were Wolves?

For what could a hunter wish for more strongly than to be able to assume the nose and the speed of his ONSLOW. hound?

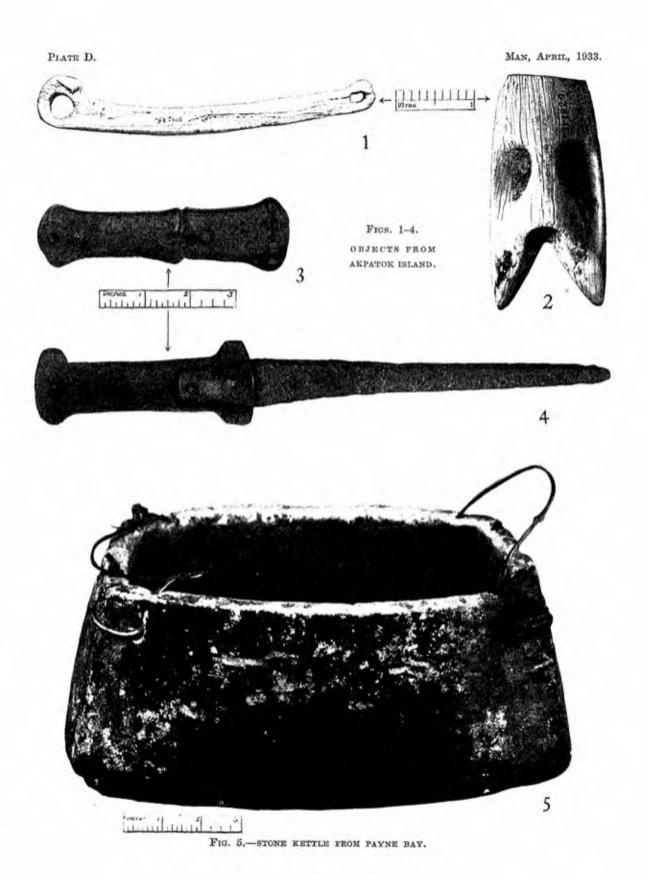
Childhood and Totemism (Cf. Man, 1933, 45.)
Sir.,—The facts cited by Miss Durham are capable of a totally different explanation. Many animal lovers are in the habit of speaking to and of their pets as if they were their own children, and Miss Durham is probably unjust in construing as natural stupidity a child's excusably unsuccessful attempts to make sense out of her elders' misleading statements.

As for the story of the woman who gave birth to puppies, this is an ancient myth and, like all myths, is

of magico-religious origin.

I should like to ask Mr. Hornblower two questions. How does he know (1) that playing at bears is more natural than playing at halma; and (2) that 'bear' to the average child means more than something which makes an alarming noise?

So far as I know, all attempts, such as those of Dr. Margaret Mead, to ascertain scientifically whether children naturally identify themselves with animals, have given completely negative results. RAGLAN.



ESKIMO OBJECTS FROM UNGAVA BAY.

MAN

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APRIL, 1933.

ORIGINAL ARTICLES. With Plate D.

N. America: Eskimo.

Cox.

Eskimo Remains on Akpatok Island, North-East Canada. By Ian Cox, Sedgwick Museum, Cambridge.

In August-September of 1931 the Oxford University Hudson Straits Expedition spent five weeks on Akpatok Island, Ungava Bay, North-East Canada. References to this island (Eskimo Aukpat'tok, "island of guillemots") in literature are extremely scanty. Hudson sighted it in 1610 and called it 'Desire Provoketh'; Bell¹ records a landing for a few hours there; and Turner² in addition to the few remarks noted below, writes: "The large island known as Akpatok Island... "is about 100 miles long and has an average width of 18 miles. It is the largest island in the Strait "proper.". But Turner had evidently not been there, for the island is no more than 28 miles long and 14 miles wide. Akpatok is strongly cliffed for practically all of its perimeter and consists of a central plateau at about 700 feet dissected toward the sea by deep gorges produced by the rejuvenation of its streams. It is barren.

That Eskimo visited the island in the past is shown by areas littered with skulls of walrus, which they have dragged up from the shore to knock out the tusks at leisure, and a large midden. However, as far as could be discovered at Port Burwell (the nearest settlement visited by the Expedition) no Eskimo or white man now at that post had been to Akpatok. Reports as to its size and position, therefore, varied greatly. Although they know it to be a good hunting ground for walrus, Eskimo will not venture there and they attribute this taboo to the presence of ghosts on the island. A seaman whom the writer asked to enquire of this matter at Payne Bay (on the West shore of Ungava Bay) was told that two families from that area went to live on the island about seventy years ago; they were reduced to starvation and became cannibal. Since then no one from Payne Bay has visited the island. Turner⁴, writing in 1889, says that: "the island of Akpatok is now tabooed since the murder "of part of the crew of a wrecked vessel, who camped on the island. Such a terrible scene was too "much even for them; and now not a soul visits that locality, lest the ghosts of the victims should appear and supplicate relief from the natives, who have not proper offerings to make to appease "them." This information presumably came from Fort Chimo (on the South shore of Ungava Bay). No trace of the wreckage of a vessel was found by the Expedition.⁵

Akpatok Island, as well as being a good ground for walrus in season, is inhabited by many guillemots, ptarmigan and white bear. The latter were known to the Eskimo of Fort Chimo when

Bell, R. 1897. Summ. Rept. Geol. Surv. Canada, Vol. X, p. 79.

² Turner, L. M. 1889-90. 'Ethnology of the Ungava district, Hudson Bay territory.' 11th Ann. Rept. Bureau American Ethnology.

³ For a new map of Akpatok Island, see Geographical Journal, Vol. LXXX, 1932, p. 220.

⁴ Turner. Op. cit., p. 186.

⁵ An old grave, covered with a piece of driftwood and boulders, was excavated. The skeleton was lying on its back with hands on the pelvis; no objects were buried with it. Unfortunately it is impossible to say from the photographs (circumstances preventing the removal of the skull) to what race the individual belonged.

Turner⁶ wrote that: "Akpatok Island and the vicinity of Cape Chidley are reported to be infested "with these brutes."

The Eskimo who used to visit the island are presumably related to the Koksoagmyut, the people of the Koksoak River, who "consider themselves a part of the people dwelling as far to the North as "the West end of Akpatok Island and to the East as far as George's River."

The larger middens found on the island were (i) on the slope above the right gorge cliff at the mouth of the largest stream of the South coast; (ii) at the mouth of the large stream reaching the sea 2 miles North of the South-East point; and (iii) a mile inland and about ½ mile East of the ravine reaching the South coast just east of longitude 68° W. In the gorges the middens lie on the scree banks which are bound with sparse vegetation; they consist mainly of walrus skulls, bleached and overgrown with dryas and lichen. The first locality has the largest midden and a great deal of camp débris has accumulated there and is jumbled up by surface water. If one may judge from the presence of meat upon some of the bones in this place, Eskimo have visited the island more recently than the reports quoted above would show.

The objects here described are few. In addition to them occurred a quantity of fragmentary camp material in wood, bone and ivory, as well as sealskin. The numbers in brackets refer to the

Catalogue of the Museum of Archæology and Ethnology in Cambridge.

Harpoon Head. (31.1229) Pl. D, Fig. 2.—Made of walrus ivory; subsequently cut off short toward the apex so that only a short portion of the slot, cut to hold the inserted tip of metal, remains. Present length, 7.50 cm. The head is stout, more convex on the side of the line-hole (upper side) than on the under surface, which has a slight central carina. Body narrows anteriorly; the edges are slightly convex. The line-holes pierce the head in a plane parallel to the blade; they are long and deeply excavated, making the centre of the head on this side prominent and narrow. The channels are curved toward the butt and pass into wide line-grooves which extend halfway to the barbs. At the butt the head is bevelled concavely from the front and two stout barbs are produced by the intersection of this bevel and two cuts converging from the base at a point just within the circumference of the shaft-socket. The barbs are therefore flattened in the same plane as the blade. The shaft-socket is deep and tapers fairly steeply. The head is well finished.

In general body outline this head corresponds with Turner's figure 68.8 However, the line-holes and grooves of that specimen are smaller and less wide, so that the centre of the body is much wider. It differs also from the Akpatok specimen in having a much wider shaft-socket, whose margin is cut by the anterior bevel, and barbs cut off squarely. The area between the barbs is cut out square at

the apex and is not uniangular as in the Akpatok specimen.

Boas' figure 421° is also similar in body outline (though smaller), but it differs in having much shorter barbs, and, again, a much wider shaft-socket slightly open anteriorly. His figure 422, however, is interesting to compare, for the shaft-socket is similar, the barbs have the same proportion of length and the line-grooves are deeply excavated and sufficiently close together to make the centre narrow. However, there is considerable difference in the nature of the barbs, which have concave outer edges and double points. Of it Boas writes ". . . found by Kumlien in Cumberland Sound. . . .

"It was taken from a whale and differs from the device of that country. The back is bent similar to that of the iron naulang (i.e., head of a small sealing harpoon) and the barbs have two points each instead of one. The front part is sharply ridged. The specimen is very nicely finished. A few very old harpoons of the same pattern are deposited in the British Museum and were of Hudson Strait manufacture; therefore I conclude that Kumlien's specimen is from the same part

" of the country."

Foreshaft of arrow (31.1230) Fig. 1.—Of whale rib with iron tip. Length, 17·7 cm. The lower end is grooved 3·2 cm. before its termination; below this the shaft has slightly less diameter and one side is tapered in the same plane as the tip to a scarf face, which is slightly convex and scored with transverse cuts. The tip is held in a cut socket with an iron rivet.

8 Turner. Op. cit., Fig. 68, and p. 250.

⁶ Ibid., p. 174.
⁷ Ibid., p. 184. For comparison between the new map and that hitherto used, see Geographical Journal, Vol. LXXX, 1932, p. 217.

Boas, Franz. 'The Central Eskimo,' 6th Ann. Rept. Bureau of American Ethnology, 1884–85.
 Loc. cit., p. 490.

Boas¹¹ generalizes concerning such foreshafts: "The bone heads of these are joined to the shaft" as represented in fig. 422 (where the butt of the head is tapered in one plane and scarfed on to the

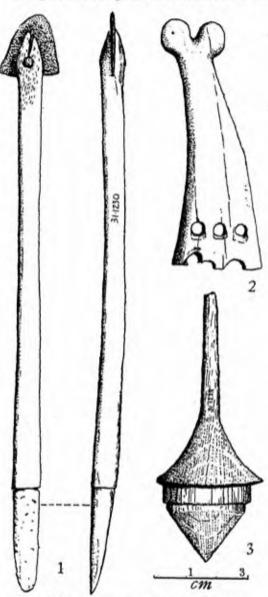
"shaft) while metal heads are inserted. "The difference in method used by the Mackenzie "and Central tribes in fastening the point (i.e., "the foreshaft) to the shaft is very striking. The "arrow point of the former and of the Western "tribes is pointed and inserted in the shaft . . . "while that of the latter is always slanted and "lashed to it. . . The direction of the slant "is either parallel or vertical to the edge." The Akpatok specimen is like figure 443c of Boas, in that there is a groove, but differs because this figure shows a concave scarf-face. However, on Boas' classification this foreshaft is of Central type.

*?Quiver handle (31.1235) Pl. D, fig. 1.—Of walrus ivory. Length, 11 cm. Pierced with a hole at each end, one being large and with bevelled edges, the other elongate. Not well finished although comfortable to the hand. It is very like an object of smaller size figured by Mathiassen¹² as "of ivory, is possibly a miniature handle of a "similar kind (?toy)" i.e., "a carrying handle for "a quiver or the like," which came from Qilalukan (Ponds Inlet).

?Tikagung (support for hand on harpoon shaft) (31.1233) Fig. 2.—Of walrus ivory. Apex carved with double ball ornament. The base is cut along the line of three drilled holes and above it are three entire holes with bevelled edges. (Through these the line binding the tikagung to the shaft would be threaded.) Quadrangular in section. Length, 7.75 cm. Well finished. Boas¹³ figures a smaller specimen which is not unlike this; it has a single ball ornament at the apex and two drilled holes toward the base.

Knife (31.1231) Pl. D, Fig. 4.—The whalebone handle (12 cm. long) widens rapidly to the top and the base from a long (8 cm.) waist. Single hole bored at the top. The iron blade (19.5 cm. long) is let into the handle by an open slot which tapers (not to a point) toward the top. This slot and that part of the blade lying in it are covered with a piece of whalebone cut to fit and riveted. The handle is not well finished.

Knife handle (31.1232) Pl. D, Fig. 3.—Made of two pieces of whalebone riveted together. Length, 14 cm. Top is pierced with a hole. The handle is waisted and 3th from the top a groove is cut round the circumference and on each flat



Figs. 1-3.—objects from anyator island.

1. Foreshaft of arrow (see text). 2. ?tikagung (see text). 3. top-like object of oak-wood.

¹¹ Boas. Op. cit., pp. 504-5. The parenthesis is the present writer's.

¹² Mathiassen, Therkel, 1927. 'Archæology of the

Central Eskimo, Rept. Fifth Thule Expedn., 1921-24.

¹³ Boas. Op. cit., p. 489 and Fig. 418c.

surface a short deep groove crosses this at right angles. The handle expands at the base, where there are four iron rivets. It is well finished.

These handles are very similar to those of the *pana* which is used for cutting skin with blubber from the flesh. An example with whalebone handle and iron blade, collected by Bell¹⁴ from the East of Hudson Bay, is especially like the latter handle.

All the above described objects are from the midden at the mouth of the South coast stream (locality 1). They are of Central Eskimo type and possibly have their origin in a district not far

removed from Akpatok Island.

Stone kettle 31.1227b was found broken and incomplete on site (iii). The largest portion includes two sides and some of the base; further fragments of the base were also found. The sides are convex with a slight carina down the median of the end; the corners are sharp; there is a smaller circumference at the top of the kettle than at the base. One pair of holes is bored at the corner from the top obliquely outward for thongs. One fragment of the base has broken across a hole bored through its thickness. As the lower 2 cm. of this is blackened with carbon indicative of use subsequent to boring it seems that this hole was bored for repairing purposes (see below) and is not an example of the practice described by Hawkes¹⁵: "All lamps and kettles placed in graves . . . " (have holes bored in the bottom) . . . to liberate the inua of the utensil and allow its use " by the shade of the owner in the other world." The measurements of this kettle are in the table below and a description of its composition in the Appendix.

31.1227a.—Represented by two pieces forming the greater part of the long side of another kettle from the same locality as the above. Shows somewhat bellied shape and smaller circumference at the top than at the base. Measurements are in the table and description of composition in the

Appendix.

31.1226.—Stone kettle from Payne Bay (Pl. D, Fig. 5). Complete but cracked from one corner to another. It has been repaired with a lacing of sealskin thongs and string through holes drilled in the bottom. These holes have been stopped with wooden plugs. The kettle is smoothly worked. All sides are convex; circumference at top is considerably less than at the base; one pair of holes drilled at each corner.

The convergence of the sides of the kettle toward the top, a feature shown by all three examples, is regarded by Boas¹⁶ as an Eastern characteristic. "The kettle which is in use among the Eastern "tribes has a narrow rim and a wide bottom, while that of the Western ones is just the opposite." Stone kettles are becoming increasingly rare among the Eskimo, their place being taken by metal containers introduced by white men.

Table of Measurements of Three Stone Kettles from the Ungava District.

		Length			Width	(cm.).		m			
-	Peripheral.		Median.		Peripheral.		Median.		Height.	Thickness.	
	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.		Sides.	Bottom.
(31.1226) Payne Bay	28.79	34.20	30 - 25	36.75	15.0	19.15	21.25	26.0	13.0	1.75	_
(31.1227a) Akpatok Island	_	32.50	-	_	_	-	_	_	13.25	1.40	-80
(31.1227b) Akpatok Island	_	30.00	_	_	18-75	21.25	_	_	15.00	2.25	1.00

These measurements may be compared with those given by Hawkes¹⁷ for kettles from Labrador. The three kettles from Ungava approximate to his medium example from Cape Chidley, but are more

¹⁴ Ibid., p. 517.

¹⁵ Hawkes, E. W. 'The Labrador Eskimo.' Geol. Surv. Canada, Mem. 91, Anth. Ser. 14, Ottawa, 1916,

p. 90.

¹⁶ Boas. Op. cit., p. 545.

¹⁷ Hawkes. Op. cit., p. 91.

Aung.

slender and less deep. The example from Payne Bay converges considerably more than Hawkes' as his measurements (here converted to centimetres) show.

Length.		W	idth.	Walaht	mi talanan
Top.	Bottom.	Top.	Bottom.	Height.	Thickness.
32.99	33.00	24.50	25.00	15.00	2.00

APPENDIX.

Stone kettles were made from native rock by the grinding out with pieces of quartz or similar It can be seen that few rocks are sufficiently soft to allow this method to be practicable, hence travel or intercourse between groups of Eskimo must account for the widespread occurrence of the kettles. The rocks from which the Akpatok examples were made are certainly exotic to the island, but since literature dealing with this aspect of the geology of the surrounding area is lacking, it is impossible to say at present where the rocks occur native. However, descriptions 18 are here appended in the hope that eventually it will be possible to trace the source of these rocks.

31.1227a is seen under the microscope to be composed of large porphyroblasts of green chlorite set in a ground mass of chlorite and white mica. In addition there is a moderate abundance of small grains of iron ore material. The chlorite shows low interference colours, is optically positive and frequently encloses a sagenitic web of rutile. It is probably retrograde after biotite. hornblende. A slice of this rock is preserved in the Sedgwick Museum, Cambridge, Cat. No. 33065.

31.1227b.—Microscopic examination shows this to be a calc-chlorite-muscovite-biotite-amphi-The light green hornblende occurs for the most part in long thin laths ($YAZ = 20^{\circ}$ ca.) projecting into a green chloritic matrix. The chlorite shows grey interference colours and is optically The brown biotite is intimately associated with the chlorite. Long laths of white mica are also present. The idioblastic outlines of the carbonate material are suggestive of dolomite. A small amount of iron ore material is present. Quartz and felspar are absent. Slices in Sedgwick Museum, Cat. No. 33066-7. IAN COX.

Burma: Spirit-World.

Some Inferior Burmese Spirits. By Maung Htin Aung.

The spirit-world of the Burmese is extremely complicated and there are kinds and kinds of spirits. However, they can be divided into two main divisions, those which are worshipped, and those which are not. The former are termed higher spirits and the latter lower. The higher spirits include those borrowed from Buddhist mythology and those pre-Buddhist spirits which were turned into semi-Buddhist ones on the introduction of Buddhism, the most important of them being the 'thirty-seven nats.' Much has been written on the spirit-world of Buddhism, and Sir Richard Carnac Temple's 'Thirty-seven Nats' is well known. But no one has written on the lower spirits in detail, though Sir J. Scott touches on them in 'The Burman.'

There are three chief kinds of lower spirits: kyat, ôt-ta-sount, and ah-sain-tha-yè.

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These handles are very similar to those of the *pana* which is used for cutting skin with blubber from the flesh. An example with whalebone handle and iron blade, collected by Bell¹⁴ from the East of Hudson Bay, is especially like the latter handle.

All the above described objects are from the midden at the mouth of the South coast stream (locality 1). They are of Central Eskimo type and possibly have their origin in a district not far

removed from Akpatok Island.

Stone kettle 31.1227b was found broken and incomplete on site (iii). The largest portion includes two sides and some of the base; further fragments of the base were also found. The sides are convex with a slight carina down the median of the end; the corners are sharp; there is a smaller circumference at the top of the kettle than at the base. One pair of holes is bored at the corner from the top obliquely outward for thongs. One fragment of the base has broken across a hole bored through its thickness. As the lower 2 cm. of this is blackened with carbon indicative of use subsequent to boring it seems that this hole was bored for repairing purposes (see below) and is not an example of the practice described by Hawkes¹⁵: "All lamps and kettles placed in graves . . . " (have holes bored in the bottom) . . . to liberate the inua of the utensil and allow its use " by the shade of the owner in the other world." The measurements of this kettle are in the table below and a description of its composition in the Appendix.

31.1227a.—Represented by two pieces forming the greater part of the long side of another kettle from the same locality as the above. Shows somewhat bellied shape and smaller circumference at the top than at the base. Measurements are in the table and description of composition in the

Appendix.

31.1226.—Stone kettle from Payne Bay (Pl. D, Fig. 5). Complete but cracked from one corner to another. It has been repaired with a lacing of sealskin thongs and string through holes drilled in the bottom. These holes have been stopped with wooden plugs. The kettle is smoothly worked. All sides are convex; circumference at top is considerably less than at the base; one pair of holes drilled at each corner.

The convergence of the sides of the kettle toward the top, a feature shown by all three examples, is regarded by Boas¹⁶ as an Eastern characteristic. "The kettle which is in use among the Eastern "tribes has a narrow rim and a wide bottom, while that of the Western ones is just the opposite." Stone kettles are becoming increasingly rare among the Eskimo, their place being taken by metal containers introduced by white men.

TABLE OF MEASUREMENTS OF THREE STONE KETTLES FROM THE UNGAVA DISTRICT.

-		Length	(cm.).		Width (cm.).					mili	
_	Peripheral.		Median.		Peripheral.		Median.		Height.	Thickness.	
	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.	Top.	Bottom.		Sides.	Bottom.
(31.1226) Payne Bay	28.79	34.20	30 - 25	36.75	15.0	19.15	21 - 25	26.0	13.0	1.75	_
(31.1227a) Akpatok Island	_	32.50	_	_	_	_	_	_	13 · 25	1.40	-80
(31.1227b) Akpatok Island	-	30-00	_	_	18.75	21.25	_	_	15.00	2.25	1.00

These measurements may be compared with those given by Hawkes¹⁷ for kettles from Labrador. The three kettles from Ungava approximate to his medium example from Cape Chidley, but are more

 ¹⁴ Ibid., p. 517.
 15 Hawkes, E. W. 'The Labrador Eskimo.' Geol.
 16 Boas. Op. cit., p. 545.
 Surv. Canada, Mem. 91, Anth. Ser. 14, Ottawa, 1916,
 17 Hawkes. Op. cit., p. 91.

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Length.		W	idth.	Weight	Thickness.
Top.	Bottom.	Top.	Bottom.	Height.	Thickness.
32.99	33.00	24.50	25.00	15.00	2.00

APPENDIX.

Stone kettles were made from native rock by the grinding out with pieces of quartz or similar hard minerals. It can be seen that few rocks are sufficiently soft to allow this method to be practicable, hence travel or intercourse between groups of Eskimo must account for the widespread occurrence of the kettles. The rocks from which the Akpatok examples were made are certainly exotic to the island, but since literature dealing with this aspect of the geology of the surrounding area is lacking, it is impossible to say at present where the rocks occur native. However, descriptions are here appended in the hope that eventually it will be possible to trace the source of these rocks.

31.1227a is seen under the microscope to be composed of large porphyroblasts of green chlorite set in a ground mass of chlorite and white mica. In addition there is a moderate abundance of small grains of iron ore material. The chlorite shows low interference colours, is optically positive and frequently encloses a sagenitic web of rutile. It is probably retrograde after biotite. There is no hornblende. A slice of this rock is preserved in the Sedgwick Museum, Cambridge, Cat. No. 33065.

31.1227b.—Microscopic examination shows this to be a calc-chlorite-muscovite-biotite-amphibolite. The light green hornblende occurs for the most part in long thin laths ($YAZ = 20^{\circ}$ ca.) projecting into a green chloritic matrix. The chlorite shows grey interference colours and is optically positive. The brown biotite is intimately associated with the chlorite. Long laths of white mica are also present. The idioblastic outlines of the carbonate material are suggestive of dolomite. A small amount of iron ore material is present. Quartz and felspar are absent. Slices in Sedgwick Museum, Cat. No. 33066-7.

Burma: Spirit-World.

Some Inferior Burmese Spirits. By Maung Htin Aung.

Aung.

The spirit-world of the Burmese is extremely complicated and there are kinds and kinds of spirits. However, they can be divided into two main divisions, those which are worshipped, and those which are not. The former are termed higher spirits and the latter lower. The higher spirits include those borrowed from Buddhist mythology and those pre-Buddhist spirits which were turned into semi-Buddhist ones on the introduction of Buddhism, the most important of them being the 'thirty-seven nats.' Much has been written on the spirit-world of Buddhism, and Sir Richard Carnac Temple's 'Thirty-seven Nats' is well known. But no one has written on the lower spirits in detail, though Sir J. Scott touches on them in 'The Burman.'

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There are three chief kinds of lower spirits: kyat, 6t-ta-sount, and ah-sain-tha-yè.

The ah-sain-tha-yè are the most common, and the nearest English equivalent is the 'ghost' of magazine stories. These spirits want to hurt and frighten human beings. There are four different kinds, or rather different grades of them. The least powerful is the hmin-zar, which shows itself in the form of a little animal, such as a cat, dog or rabbit, and it frightens a human being by suddenly darting out of the darkness. Because it is very small, it often fails to frighten. But it can harm a human being by running round him in three completed circles, for then the man will die in seven days. The ta-hsè can show itself in various forms and make noises and usually succeeds in frightening the average

person. The tha-yè is a more powerful ta-hsè, and the tha-bet is a more powerful tha-yè; otherwise there is very little difference between tha-yè and tha-bet. Both can inflict physical injury and they are not afraid of human strength; a ta-hsè will run away from a blow with the fist, but the other two are able to close with champion wrestlers even. The hmin-zar and the ta-hsè are contented with raw meat, but the others prefer human flesh, and therefore try to kill human beings whenever they can. Nobody worships these spirits; but witches and witch-masters (those who cure bewitched persons) befriend them by giving them raw meat regularly and thereby making the spirits their servants. If the usual meal is not given, the servant-spirit attacks the master with great fury, unless he be extremely powerful.

The ôt-ta-sount or 'guardian of treasure' is a spirit that guards hidden treasure, which may be gold and jewels or merely a few copper coins. The power of the spirit usually depends on the value of the treasure. Normally the spirit does not harm human beings, and often it will assume human form and wander among humans. It can harm a human being only when he enters the hole in which the treasure is hidden. A person will enter such a hole only when he is a magician treasure-seeker or when he is tempted by the spirit to enter. A magician will force the spirit to show the hole and give him entry, and then the magic would fail, leaving him entirely at the mercy of the spirit, who, of course, kills him at once. Sometimes the spirit wants a mate or a companion, and then it will assume human form, and tempt a person by its beauty or by showing its wealth to enter the hole, which is made to appear to the human as a magnificent house. A human being can see the treasure only when the spirit makes him see; even a magician treasure-seeker cannot see until he has forced the spirit to make him see. When a human being is killed by the spirit, he becomes a spirit himself, and has to guard the treasure. In the ordinary course of things, however, the spirit seldom interferes with human beings if they refrain from interfering with the spirit. Often it is quite forgiving, and the punishment meted out to a meddling human being is very slight; the spirit will let him take some portion of the treasure, but the moment he reaches home he will itch all over his body, and until the treasure is returned to the place where it was found, the itch will torture the man. The spirit is sometimes even magnanimous and gives some gold or silver or jewels to a human being.

The kyat is totally harmless. These spirits live in colonies in little holes in the ground, which remain exposed to human sight in the day. At night the spirits come out and, assuming human forms, they feast and eat and laugh the night away. They do not wish to be disturbed by inquisitive humans, and therefore when a human being discovers a hole and guesses it to be a kyat hole, the spirits change their abode. When they move to a new place, they do so at night also, assuming human forms. They are kindly spirits and if there is no danger of a human being guessing that they are spirits, they are eager to entertain him; if a lone traveller loses his way in the forest at night, the kyats will attract him to their feast by sounds of jollity and then give him food and drink and will tell him the way he

has to go before dawn has come.

The kyat and the treasure-spirit are similar in the fact that they can assume human form and talk and mix with human beings. The other spirits can assume human form, but they cannot mix or talk, and whereas they are always on the look-out to harm human beings, the kyat and the 6t-ta-sount

love human company for its own sake.

All these lower spirits are forces of evil and therefore are frightened of religion and piety. The more powerful a spirit is, the less is it in fear of human beings; a hmin-zar usually attacks children and women, the ta-hsè will run away if a human being recites extracts from the Buddhist scriptures, but a tha-bet will not run away unless the person reciting is pious. When a lower spirit is troublesome, the human beings can appeal to a monk to come and recite prayers on the spot, or pay a 'master of magic' to try his art against the power of the spirit, or make offerings to nats and beg them to order the spirit to leave the place or refrain from molesting the humans, or appeal to an administrative official to order the spirit not to interfere with the king's subjects on pain of exile from his dominions. The belief in these spirits has lasted for centuries and will not die out for years to come. Even at the present day a headman, on appeal by the village, will often read solemnly a proclamation in the name of His Majesty Emperor George V, ordering a tha-yè to refrain from molesting the villagers, just as the headman's predecessors in the office read similar proclamations in the name of the Burmese kings, for a spirit is powerless to disobey an order of exile from the Crown.

MAUNG HTIN AUNG.

Britain: Archæology.

Mesolithic Sites on the Burtle Beds, near Bridgwater, Somerset. By Grahame Clark.

The Burtle Beds are so called from their occurrence at Burtle, north of the Polden Hills and south of the River Brue, Somerset. They are not, however, confined to the north of the Poldens but extend intermittently around the edges of the Bridgwater level. They "consist of sea-sand with layers of sandy shell limestone and occasionally rounded pebbles of flint, Lias "limestone, Upper Keupar Marl, Triassic sandstone etc." H. B. Woodward in his 'Geology of the East Somerset and Bristol Coalfields,' 1876 (p. 163), tells us that "the shells are almost entirely marine, though there do occur occasionally land- and fresh-water forms; all are of existing species." His final sentence has been invalidated by the recent discovery of Corbicula fluminalis by Drs. J. W. Jackson and A. Bulleid,² who in their communication to the Centenary Meeting of the British Association in London pointed out the full significance of their find. Quoting from the summary of their paper: "there is no evidence to suggest that the Somerset beds with Corbicula "fluminalis are later than Crayford, which is regarded as Early Mousterian from its contained implements." In addition to dating the beds they have brilliantly explained them as "distinctly related to the Raised Beaches of the neighbouring coast, seen near Weston-super-Mare, being, in fact, "the littoral sands deposited during the subsidence which closed with the formation of the beaches."

At Greylake, Middlezoy, to the south of the Poldens, a fine section has recently been exposed showing the Burtle Beds overlain by grey sandy sub-soil (from 22 to 27 inches as a rule, but also filling depressions in the Burtle Beds to another two feet) and dark top-soil (15-20 inches). It is from this top deposit that Mr. H. S. L. Dewar of Catcott has patiently collected, both from the face of the section and from the material removed to expose the sand for exploitation, a considerable series of worked flints. He has been careful to keep every fragment however small and apparently unimportant it seemed. It is through his kindness3 that I am able to illustrate a series from the Middlezoy site in Fig. 1. The flints have been densely patinated to a white colour, a few showing a greyish mottling. In addition many have been slightly stained rust-coloured, often forming patterns reminiscent of roots. Such discoloration is sometimes seen on patinated flints from the Cambridgeshire fens. The flints are otherwise fresh and well-preserved. The cores (e.g., Nos. 1, 2), with their small narrow flake-scars are such that we should expect the presence of microliths, and were commonly flaked down producing curious flakes like No. 3, of which the thicker end represents the greater part of the striking platform of a core. The base of a large core struck off by a lateral blow was re-worked into a fine burin showing three burin facets (No.4), while another core-trimming of triangular section has also apparently been turned into a burin (No. 6).4 One complete and one fragmentary microlith (Nos. 8 and 9), both obliquely blunted and of non-geometric form, have been yielded by the site. Scrapers are abundant and include end-scrapers (Nos. 6, 7, 11, 12) and smaller forms trimmed either all round (No. 10) or on one edge (Nos. 13-14). In addition there is a considerable mass of flakes and cores representing the debris of the industry.

To the north of the Poldens, at Shapwick, Mr. Dewar has discovered another site yielding a very similar flint industry and situated likewise on the Burtle Beds. In this case there is no section exposed and the flints have been obtained from chance disturbances of the surface. Both in their state of preservation and in their typology they agree closely with those from the uppermost stratum of the Middlezoy section. Whereas from Middlezoy only two microliths were obtained, we have five examples from Shapwick, many of them broken, illustrated by fig. 2 (Nos. 2, 5, 6, 10, 11). Those of which enough remains to deduce their form agree with the Middlezoy examples, consisting of non-geometric points with oblique blunting. In No. 7 we have the basal end of what appears to have been a large blade with battered back. The splendid double-ended burin (No. 3), which is calcined but little damaged, serves as another link with the Middlezoy industry. It may here be added that neither site has yet produced the micro-burin. Considering the care with which

¹ L. Richardson, "Wells and Springs of Somerset," Geological Memoir, 1928, p. 40.

^{2 &}quot;Report of the British Association Centenary Meeting, 1931," London, p. 379.

³ I should also like to thank Mr. G. C. Dunning for drawing my attention to Mr. Dewar's work.

⁴ No. 6 cannot be regarded with the same certainty as No. 4. Having only one burin facet it might be regarded as a burin de fortune.

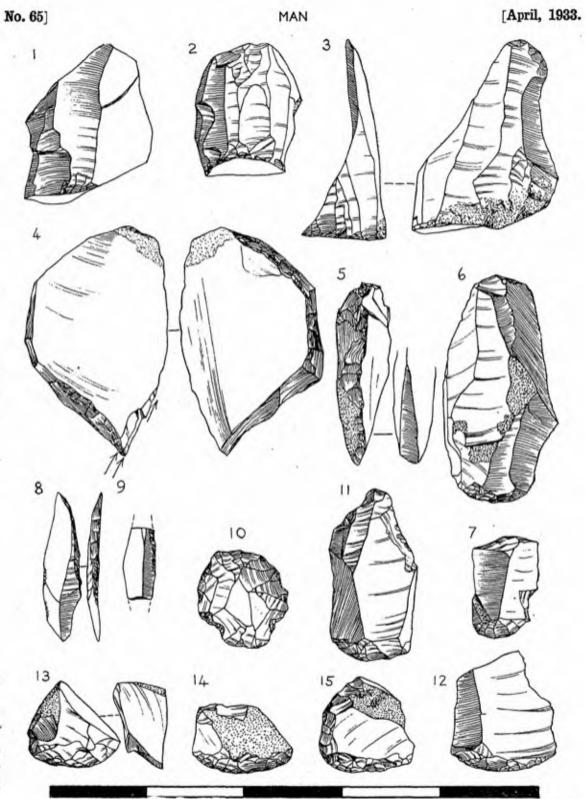


Fig. 1. Flints from middlezox. Scale in inches.

[64]

Mr. Dewar has collected the material this lack of micro-burins cannot be passed over as of no value.

Typologically the most important features of the Middlezoy and Shapwick flints are the presence of true burins and microliths of non-geometric form, and the apparent absence of the micro-burin. On this evidence we should be inclined to place them at the beginning of the Mesolithic period. The modification of Upper Palæolithic tradition has been relatively slight and the

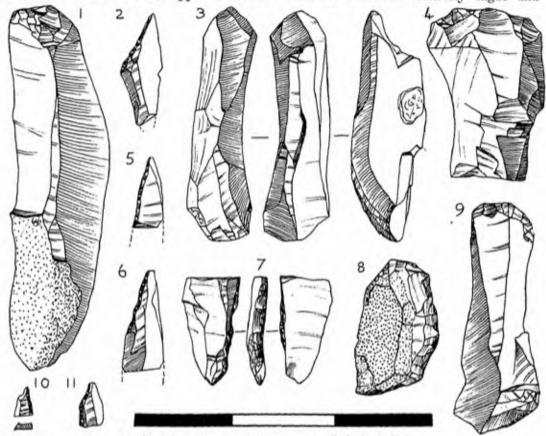


Fig. 2. FLINTS FROM SHAPWICK. Scale in inches.

Tardenoisian micro-burin has not made its appearance. Fortunately, however, we are not entirely dependent on typology for our dating. At Middlezoy, as we have seen, the industry occurred in top-soil being separated from the Burtle Beds proper of Mousterian age by an intervening stratum of grey sandy sub-soil. As to the age of this deposit I have sought the aid of Dr. Wilfrid Jackson, who writes: "It is difficult to date precisely the deposit between the Burtle Beds and the topsoil "with flints. I have a feeling that the deposit may be contemporary with the Blown Sand and "Head on the Raised Beach on the coast. This would make it Magdalenian."

GRAHAME CLARK.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Early Human Remains in East Africa. Report of a Conference at Cambridge convened by the Royal Anthropological Institute, 18-19 March.

To discuss the early human remains recently discovered by the East African Expedition of Dr. L. S. B. Leakey, the Royal Anthropological Institute convened a conference to examine the material which is now assembled in Cambridge.

⁵ Letter dated 13th of December 1932.

The Conference met on 18 and 19 March at St. John's College, through the courtesy of the Master and Fellows. Sir Arthur Smith Woodward, F.R.S., presided. After hearing Dr. Leakey's exposition of his discoveries, and a general discussion of questions arising therefrom, the Conference appointed committees to report respectively on the geological, palæontological, anatomical, and archæological evidence. The reports of these committees were submitted to the Conference as follows:—

The Geological Committee has considered the problems placed before them from the point of view of the material available for examination and of the stratigraphical evidence. (a) Material: i. Kanjera. The Committee are agreed that the fragments of skull picked up from the surface have the same source as those found in situ, their state of mineralization being similar. ii. Kanam. So far as can be determined from the tests made, the mineralization of the Kanam mandible seems to be the same as that of the rhinoceros bone found in the same deposit. (b) Stratigraphical. Of the geologists present on the Committee two have seen the Kanjera Deposits, although not with Dr. Leakey. Others have had experience of similar strata in East Africa, and the rest have brought to bear on the question their general experience of stratigraphical problems. From the evidence supplied by Dr. Leakey, the Committee can see no escape from the conclusion that the Kanjera skull-fragments occur in the calcareous deposit which yielded the following fauna: E. antiquus recki, etc. [as in the palæontological report below] and the implements of evolved Chellean type. Further, that the Kanam mandible was derived from the horizon which yielded implements of pebble-tool type only. This horizon also furnished the following fauna: two spp. of Mastodon, two of primitive elephant, a species of Deinotherium and a small variety of hippopotamus.

The Committee, after considering the character of the Kanjera deposit, do not believe that the fragments can have been introduced into the calcareous deposit at a later date, and feel clear that

the two fragments said to be found in situ belong in fact to the original deposit.

Also, those members of the Committee who have seen the deposits in question, support Dr. Leakey in his view that the Kanam and Kanjera deposits antedate a period of great local tilting and faulting and of volcanic activity.

The Committee on Palæontology reports that Kanam East and Kanam West exhibit differences only in the relative numbers of the fossils of different groups. With the human jaw at Kanam West were found close relatives of the two types of rhinoceros still living in the region, a small hippopotamus, a pig, an antelope, fragments of Mastodon, two teeth of a very large Deinotherium and remains of Trionyx. In Kanam East the collection consists chiefly of Mastodon with a primitive elephant Deinotherium, and a few specimens of hippopotamus, rhinoceros, horse, and a young monkey.

The fossils from Kanjera have a later aspect. One elephant has dental plates as deep as those of E. antiquus, and all the remains of elephant are of Asiatic or European type. At least two antelopes, Hylæochærus, Phacochærus, and a large pig distinct from that of Kanam West, have a very modern appearance. A baboon is remarkable for its comparatively short face. One equine upper molar approaches Hipparion, if it does not actually belong to that genus. Typical Equus also occurs. Fragments of mastodon, rhinoceros, a giraffoid, hippopotamus, and a carnivore have also been found.

The Committee thinks that the Kanam deposit should be referred to the Lower Pleistocene, in which the *Deinotherium* and *Maslodon* are survivals from the Upper Pliocene. It also thinks that the Kanjera fauna cannot be later than the Middle Pleistocene.

The Anatomical Committee appointed to report on the fragments of bone collected by Dr. Leakey

beg leave to report as follows :-

A. Kanjera No. 3.—(1) These specimens exhibit a condition consistent with great antiquity, and the Committee agrees to the correctness of associating all the fragments in question. (2) In the specimens submitted to them the Committee have observed no characteristics inconsistent with the reference to the type of Homo sapiens. (3) The absence of a frontal torus seems to exclude Kanjera No. 3 from association with Neanderthal types. (4) Pending further enquiry the Committee are not able to cite examples of cranial vaults of the thickness characterizing Kanjera No. 3 in non-pathological examples of the modern types of Homo sapiens: but they note the occurrence in Piltdown (Eoanthropus) and the Boskop calvaria. (5) The Committee have noted the presence of a transverse occipital suture, which is rare in modern crania. (6) While reconstructions must be to some extent

conjectural, yet those submitted agree in indicating a cranial length of from 200-209 mm. (7) The Committee have observed no detail in the fragment of femur inconsistent with its inclusion in the type

of Homo sapiens.

B. Kanjera No. 1.—(1) This specimen has been reconstructed by Dr. Leakey and Mr. McInnes from numerous fragments. The Committee accept their association but are not able to exclude the possibility of some distortion of the actual specimen being manifested in the reconstruction. (2) The Committee see no reason to distinguish between Kanjera No. 1 and No. 3, either in regard to the degree of mineralization, or in regard to antiquity. (3) The Committee note that Dr. Leakey's reconstruction and his placing of the two main pieces of the specimen provides a maximum length of 200 mm., and that the mid-sagittal contour is strongly suggestive of that which has been accepted by them as reasonably representative of Kanjera No. 3. (4) The Committee remark that Kanjera No. 1 does not possess the great thickness seen in Kanjera No. 3, also that the transverse diameters seem to be less in No. 1 than in No. 3. (5) On the whole survey, the Committee are prepared to associate Kanjera No. 1 and No. 3 as possibly female (No. 1) and male (No. 3),—representatives of the Kanjera type.

C. Kanam.—(1) The Committee having examined the fragment of mandible, agree that the appearance of this specimen is not inconsistent with the high antiquity assigned to it. (2) With the possible exceptions of the thickness of the symphysis, the conformation of the anterior internal surface, and what seems to be a large pulp-cavity of the first right molar tooth, the Committee are not able to point to any detail of the specimen that is incompatible with its inclusion in the type of the Homo sapiens. (3) In arriving at this conclusion the Committee have had regard to the conformation of the parts about the chin. They have noted that the incisor teeth show signs of crowding. They

have detected no indication of unusual size in the canine teeth.

The Archaeological Committee, after examining the material exhibited, submits the following conclusions:—

At Oldoway, in a continuous stratified deposit, which should henceforth rank as a standard section, a worked pebble industry in bed I is supplemented in the lower part of II by an early Chellean industry with coup de poing and rostroid forms; and the pebble types persist for a while. There are indications of continuity and of a gradually evolving technique between the pebble industry and the Chellean technique. In bed III the 'later' or 'evolved' Chellean passes on into highly evolved Acheulean industry which becomes fully evolved in bed IV. Though scraper types, round butt handaxes and flake implements occur, they are not dominant at any point in the series.

At Kanam and Kanjera, stratified deposits include a similar series of industries, and therein the Kanam jaw is associated with the pebble industry, and the Kanjera skull-fragments with the Chellean

implements corresponding with those of the upper part of Oldoway II.

The pebble industry of Oldoway I has no precise counterpart in Western Europe, but is certainly anterior to the Early Chellean of Bed II. The Early Chellean culture of Bed II at Oldoway corresponds typologically with the industries of Early Pleistocene deposits in Western Europe; and the uppermost industries of Oldoway IV with those of the Thames Valley gravels with Acheulean implements. The types from Zambesi gravels and other deposits in South Africa indicate comparable lapse of time.

There is no reason to doubt that the series from East Africa is of at least equal antiquity

with the European, and it may even begin somewhat earlier.

The Conference, after detailed discussion of these reports, and of supplementary information furnished by Dr. Leakey and Mr. McInnes as to the circumstances of their discoveries, accepted the reports, congratulated Dr. Leakey on the exceptional significance of his discoveries, and expressed the hope that he may be enabled to undertake further researches, seeing that there is no field of archæological enquiry which offers greater prospects for the future. It especially urges the early organization of another expedition.

The Conference also expressed its thanks to the Human Biology Committee of the Royal Anthropological Institute for calling it together, and to the Master and Fellows of St. John's College.

A number of foreign experts in the various branches of science which bear on these discoveries had been invited, but only Professor Mollison of Munich was able to be present.

The following were present and concurred in the above conclusions:—Sir A. Smith Woodward (Chairman). A. L. Armstrong, H. Balfour, Miss D. M. A. Bate, P. G. H. Boswell, M. C. Burkitt, V. G. Childe, L. C. G. Clarke, W. L. H. Duckworth, H. J. Fleure, C. Forster Cooper, V. E. Fuchs, A. C. Haddon, A. T. Hopwood, O. T. Jones, Sir A. Kitson, L. S. B. Leakey, D. McInnes, E. H. Minns, J. Reid Moir, J. L. Myres, T. G. Mollison, K. S. Sandford, R. A. Smith, J. D. Solomon, Miss M. L. Tildesley and D. M. S. Watson.

The following were prevented from being present by illness or other urgent causes: Miss Garrod, Miss Caton Thompson, Sir Arthur Keith, Professor Elliot Smith, Dr. Harris, Professor Seligman, Dr. Buxton, Dr. Harrison and Dr. Morant.

Some Obsolescent Customs in Fiji. Summary of a Communication presented by Kingsley Roth, 7 March, 1933.

67 Contact between Fijians and Europeans began over 100 years ago, and since that time some of the customs of the Fijians have undergone considerable decay.

The whale's tooth, which has been used for at least 150 years as the highest mark of esteem which a Fijian can offer to his chief and is still his most valued possession, is becoming more scarce, partly through being sold for cash, partly because numbers of them are handed to storekeepers as pledges in order to obtain credit, and owing to other reasons.

Two particularly outstanding examples of customs which are falling into desuetude are the

crafts of making bark-cloth and pottery.

Bark-cloth used to be manufactured in a large number of districts in the archipelago. The custom survives more vigorously in some areas than in others. Among the mountaineers of Viti Levu island the method of making bark-cloth differs in several respects from that practised elsewhere in Fiji. The craft is still known and bark-cloth is made from time to time among groups who live inland from the Government hill station at Nandarivatu. Tools made from bamboo are used in many of the processes of manufacture, including that of marking the bark-cloth with a design after it has been beaten out. Smoked bark-cloth is also known to these people. One use of bark-cloth in former times was for loin coverings. Stores selling European-made articles are less common among the hills on account of difficulties of transport, but the inhabitants make use of Manchester goods for clothing to the same extent now as the coast people, although they may have to travel some distance to obtain them. The covering of the body with two and three layers of European clothing instead of leaving the greater part of it naked with the skin well oiled and exposed to sunlight is due to missionary influence. Bark-cloth is mostly used to-day for purposes of personal enhancement on ceremonial occasions and as property for presentation.

The pottery vessels, the making of which so often receives mention in the account of early travellers, are gradually being replaced by iron utensils purchased from the local stores. One of the districts where pottery making is still practised is on the Ra coast on Viti Levu, where the reputation for making good pots still holds to-day. The technique used in the manufacture of pottery in Ra differs from that formerly known to the people of Mbua province on the island of Vanua Levu, where the people of the Lekutu district used to carry on the craft extensively. It has been calculated that it is fifty years since pottery making was a normal occupation of these people. When made recently (1932) for the purpose of a record being taken of it, the operators, who were approximately sixty years of age, stated that they had never before made pottery, but that they had witnessed the processes when they were children. Details of these two crafts of bark-cloth and pottery making

have not before been recorded in detail.

A change in the type of living house inhabited by the Fijians has begun to take place in many of the villages. The change is more marked in some districts than in others, and is due in a measure to the decreasing extent to which communal labour is available for building the Fijian type of house, with its wood frame and thatched roof and walls. Official surveillance is being exercised in order to safeguard the health of the Fijians, which is considered by some to be jeopardized by the houses with corrugated iron roofs, unceiled, which it is possible for owners of house sites to purchase in parts for individual construction.

Anthropological Research in the Deccan, 1932. Summary of a Communication by K. de B. Codrington, 21 March, 1933.

Mr. Codrington explained that, though his primary interests were technological, he had been led to undertake certain ethnographical investigations owing to the great difficulty of identifying Indian peoples. The problem is dominated by the misuse of the word "caste." In India there are two words or groups of words, the orthodox Brahman varna, which remains an hieratic abstract, being distinct from jat or qaum, the actual social class or organization. Furthermore, the sense of individuality among the peoples is very acute, especially among the wanderers. An Indianvillage, at least in the Deccan, may be typified, though three languages are implicated and at least four geographically and economically distinct areas. There is, however, a great need of a cultural survey of the objects of every-day life and, above all, as first aid to the field-worker, glossaries of the common terms of the countryside. Mr. Codrington illustrated the agricultural implements, village crafts and marketing of a village near Ajanta. Across the firm structure of such local communities, interlaced by exchange marriages, come and go the wandering peoples. Indigent Pardhis, once in the days of the enormous herds of black buck, of which Jerdon speaks, in great demand as snarers, now professionless, but to be found speaking Gujarati beyond the Dravidian linguistic borders; Waddars, Telegu stonemasons and earth-workers, whose women still obey the ancient rule of the south that the breast must not be covered, following the demand for their craft into Rajputana and Gujarat; Lamanis, once upon a time carriers and general supply and transport to the armies of kings, now forced to settle on bad fringe lands of the villages, poor tillers of the soil, but excellent breeders of cattle, still preserving their own Hindi speech. The question of nomenclature is a great stumbling-block in discussing such widely-distributed peoples. Our caste terminology is taken from the District Gazetteers, and the terminology of the adjacent districts often does not coincide. Thus the Pardhis are actually one with the Wagris of Gujarat; the Bhampta, well known as a railway thief, is, or rather was, a Waddar, and speaks Telegu at home; the Kaikadi, Korwa, Korcha and Yerkala are actually one great people, straddling the whole Deccan, although their house-language shows Tamil connections. It is with reference to such widely distributed castes that the necessity of physical records becomes evident. Mr. Codrington showed abstracts of the anthropometrical details of some six hundred individuals he had been able to measure. The results, though not fully worked out, indicated the importance of accurately identifying every individual, especially as to the marriage-area of his family, and of comparing each local group before proceeding to a general average for the caste. Perhaps the most striking point of these measurements was the extreme microcephaly discovered. Mr. Codrington suggested that a strictly genetic approach to the anthropometry might be very fruitful. The paper was illustrated by slides and drawings. Lamani and Pardhi costumes were exhibited, and also Kathodi and Chenchu weapons.

OBITUARY.

The Rev. Archibald H. Sayce: born 25 September, 1845: died 4 February, 1933.

Young men can claim acquaintance with Professor Sayce, who died at the age of 87 on 4 February this year; that was typical of the man. Never physically strong, he followed with indefatigable eagerness every new development in the studies he had made his own, and was at work on new material just before his death. A review from his pen appeared in Man, 1933, 13.

Elected to a Fellowship at Queen's College, Oxford, in 1869 as a young and delicate man of 24 years of age, Sayce's chosen subject was Semitic Languages, and more particularly the application of the principles of Comparative Philology as laid down for the Indo-European languages to the Semitic family; but his particular interest lay in the development of the decipherment of the cunei-

form inscriptions, on which the discoveries of George Smith concentrated public attention between 1872 and 1877. Sayce provided a fitting academic counterpart to the Museum official's work with books on Assyrian Grammar and Language, and when Smith died, very efficiently saw two important books through the Press. But his principal service to Assyriology was the elucidation of the astronomical reports from Ashurbanipal's library, and pioneer work on the religious texts.

The taste for decipherment will always find plentiful material in early texts from Western Asia; by 1880, Sayee was immersed in the decipherment of the texts from the district round Lake Van in cuneiform signs of the late Assyrian period, and in the 'Hittite' hieroglyphic inscriptions of unknown date. In the first task he met with astonishing success, and the decipherment of the language then

called 'Vannic' is due to him, and in a less degree to Stanislas Guyard. The Hittite inscriptions and the cuneiform inscriptions from Anatolia were more intractable; throughout his life Sayce returned to them continually, but never produced a final and satisfactory interpretation that others could accept. It is one of the accidents of scholarship that at the moment of Sayce's death an article was published in Germany, partly following Sayce, which seems to promise a definitive decipherment of the puzzling script, and that the 'Vannic' inscriptions are again being subjected to intensive study which, without altering the major part of Sayce's work, is basing the grammar and vocabulary of the language on a firmer foundation.

A quick and eager mind, impatient of long and arduous study, will turn to general implications and produce interesting deductions prematurely. When serving on the Old Testament Revision Company, Sayce had wished to apply deductions from his studies in a manner that did not appeal to his colleagues; and throughout his life he waged an intermittent struggle against the 'Higher Critics' which led him to write much on Palestine and Biblical subjects from a comparative point of view. On such matters the general reader found him interesting, the specialist inaccurate. There was in his general attitude a modicum of truth which the 'Higher Critics' doubtless recognize; historical development is not logical, and the logical deductions of textual critics sometimes do not fit into the historical framework we know. But the controversy was largely fruitless, and even harmful, and Sayce's 'Reminiscences'-an amusing and readable book-seems to show his realization of errors committed.

To Egypt his interest in and physical need for travel took him almost every winter for many years, but his only important contribution to Egyptian studies was his collaboration with Cowley in the editing of the Aramaic papyri from Elephantine.

A fascinating personality, lovable and beloved by all who knew him, Sayce was a cause of stumbling to foreign scholars and an ornament of nearly every English learned society. He became a life member

of the Royal Anthropological Institute in 1876, and was awarded its highest honour, the Huxley Memorial Medal, in 1930 when he lectured on the Antiquity of Civilized Man.' His memory will long remain fresh and pleasant with us, as he SIDNEY SMITH. himself was.

PUBLICATIONS.

Assyrian Grammar for Comparative Purposes, 1872. The Principles of Comparative Philology, 1874. Translations in Records of the Past, 1st series,

Archaic Classics. An elementary grammar with full syllabary and progressive reading book, of the Assyrian

language, in the cuneiform type, 1875. Babylonian Literature, 1877.

Introduction to the Science of Language, 1879.

The Monuments of the Hittiles, 1881.
The Cuneiform Inscriptions of Van deciphered and translated, 1882.

Herodotos I-III, 1883.

Fresh Light from the Monuments, 1883.

The Ancient Empires of the East, 1884.

The Inscriptions of Mal-Amir, 1885.

Introduction to Ezra, Nehemiah and Esther, 1885.

Assyria, 1885.

Hibbert Lectures, 1887. On the Origin and Growth of Religion as illustrated by the Religion of the Ancient

The Hittites, 1889.

The Races of the Old Testament, 1891.

The Higher Criticism and the Verdict of the Monuments, 1894.

Patriarchal Palestine, 1895.

The Egypt of the Hebrews and Herodotos, 1895.

Early History of the Hebrews, 1897.

Early Israel and the Surrounding Nations, 1898.

Babylonians and Assyrians, 1900.

Genesis in the Temple Bible, 1901.

The Religions of Ancient Egypt and Babylonia, 1902. Commentary on Tobit, &c., 1903. The Archwology of the Cunciform Inscriptions, 1907.

Reminiscences, 1923.

Assyria: its Princes, Priests and People, 1926. Numerous editions of Archaic Texts.

REVIEWS.

NEW CALEDONIA : FOLKLORE Université de Paris : Travaux et Mémoires de l'Institut d'Ethnologie-IX. Maurice Leenhardt. Documents Néo-Calédoniens. Paris. Institut d'Ethnologie, 1932. 514 pp. In this volume M. Leenhardt has brought together a

large number of Folk-tales from the central region of New Caledonia. Nearly all are given as transcribed by native authors in the Houailou dialect, and are accompanied by interlinear and free translations, and copious notes.

The first five stories are named by M. Leenhardt the "Lizard Cycle," from the totemistic lizard whose actions form their basis. In the first and oldest story—The Chief of Koné-the lizard (rhai) is identified with the Chief of Boexawe1, who is angered by the intrusion of a

stranger into his domain. The stranger is the Chief of Kone, who has set traps along the route from Kone to Boéxawé. The lizard is caught in the last trap and is recognized as the Chief of Boéxawé. With many apologies and offers of servitude, treasure, wife and family the Chief of Koné sets his captive free, but his offers are rejected with scorn. The lizard jumps upon the neck of his captor, who is compelled to carry his dreadful burden home, to the horror of his wife and family. The lizard chief is provided with food, eaten while seated on his victim's neck, and sleeps with his hands clasping his neck. In slumber the lizard's hold relaxes and the Chief of Koné gets free. He gives his wife instructions as to the up-bringing of his children and then flees down northward, from the barren region south of Koné to the fertile northern plain. At day-

¹ The sound of x is that of Lifu x, Melanesian g, b = mb, rh = rsh, other sounds as in French.

break the lizard chief awakes, finds the track of the Chief of Koné and follows. The fugitive is harboured by successive chiefs who are terrified by his pursuer, whom they recognize not as a person but as an arü (chose sacrée ou prestigeuse). The fugitive finally reaches the Chief of Poéréxo, who by his magic appeases the wrath of the lizard and so enables the Chief of Koné to return to his home.

The second story—the Grandsire of Névou—shows the ancestral lizard with magical powers, dwelling with his human descendants and providing for their needs. The third story—the lizard of Wendo—tells of the lizardman caught by a woman, cut up and placed in the oven. Thence comes forth a handsome man who enters into human relationships and helps his people, but is very sensitive with regard to totemistic observances.

The story of the lizard of Ourouro appears as a later version of the first. In this, however, the pursuing lizard no longer finds human beings who can appease him by magic, but is a terrifying ogre who is killed by a heated iron. M. Leenhardt has added to the cycle the story of the Chief of Touho, told by Père Lambert as a war story intended to excite the natives against the whites. Though there is no mention of the lizard, the incidents of the trapped chief becoming a burden to his captor, the flight of the latter after getting free, and his final release by violent means, closely resemble the story of the Chief of Koné.

The foregoing will give some idea of the nature of M. Leenhardt's work. The remaining sixty-one narratives include stories, speeches, songs and even dramatic pieces. These cover the whole range of New Caledonian Folklore as told by the Houailou people. There are copious notes on customs and linguistic expressions, and the whole collection is a vivid illustration of native life. M. Leenhardt has made a valuable contribution to anthropological and linguistic knowledge of this little-known part of Melanesia.

S. H. RAY.

INCEST-TABU.

Jocasta's Crime. By Lord Raglan. ix + 215 pp.
Methuen & Co., 1933. Price 6s. net (cloth).
Lord Raglan, in this brightly written little 71

book, grapples with the formidable problem of why lokaste, or anyone else entering upon an incestuous union, was ever considered guilty of a crime (sin, piaculum) at all. In the opening chapters he assails the various theories which are or have been current, sometimes amusingly, for an anthropologist has as good a right as Horace to tell the truth with a laugh, sometimes with keen logic. The only serious criticism here is that he occasionally wastes muscle in flogging a very dead horse; but it is remarkable how long a defunct theory will haunt popular books and periodicals, so his labour, in a book intended for the educated public generally, is not wholly lost even here. He is much less convincing when he passes to positive theorizing himself, quite apart from the prejudice which some readers will feel because he is not merely a distributionist in general, but of the school of Dr. Elliot Smith in particular. The reviewer finds little that is plausible in his suggestion (chapter xix) that two-class exogamy arose from a people living on a river-bank, the men on one side and the women on the other, and not much to commend in the elaborate theory, to which the concluding chapters are devoted, that such figures as Oidipus and Iokaste originally represent the divine king and his sister-queen, playing their extremely holy (and therefore extremely tabu) parts in an annual rite of world-creation and

For apart from general improbabilities, there runs throughout the book a far too frequent neglect of that great commandment of the researcher, "Thou shalt "verify thy references." Taking those most familiar to the reviewer, the classical, the following are instances. On page 111 we hear that "the Romans believed" and on page 115 that "peasants of Italy" had certain rites concerning menstruation. If the passages on which these statements rest are traced to their lairs in Pliny, Columella and other authors, it will be seen that the beliefs are learned and mostly Greek, the rite confessedly foreign. So on page 148, it is stated, on the strength of a misunderstood passage in Farnell, that Artemis called herself wife, sister and daughter of Apollo. No ancient says anything of the kind; there was a priestess of Apollo once, so Pausanias was told (x, 12, 2), who was named Herophile, but "in her poems she calls "herself not Herophile only, but Artemis, and says
that she is the wedded wife of Apollo, elsewhere that "she is his sister, and again that she is his daughter"; in other words, she used different metaphors in different passages to express her close relation to the god who inspired her. On page 142 the statement that the Eleusinian hierophant took the part of the Creator is one now believed by no serious student of the mysteries, and I do not know on what the remarkable dictum (page 181) rests, that a Roman supposed himself closer akin to his adopted than to his real son; the formula used (Gellius, v. 19, 9) painstakingly makes it clear that he was considered just as much akin, no more and no less. On page 189, so far from it being true that in a Greek wedding the bride and bridegroom personated Zeus and Hera, our one authority on the 'sacred' marriage' in connection with human weddings, Photius, Appendix, s.u. lepos yduos, clearly distinguishes the divine from the human couple and gives no hint that anyone ever identified them.

Evidence from folklore is used with equal lack of care; for example, if the English joke about mothers-in-law really goes back to a savage rite of avoidance, there should be plentiful examples of it in the earlier records of that quite well-documented subject, English popular jests. But where are these examples? In dealing with Christian custom, on page 172 the prohibition of remarriage by an Orthodox priest is suggested to be due to his once having got his priesthood through his wife. But a glance at older history tells us, firstly, that pre-Christian priesthoods in Greece descended, if at all, in the male line, and secondly, that the explanation of the prohibition is the early Christian dislike of re-marriage by anyone.

Instances could be added of loose reasoning and of misunderstandings of authors quoted, while the discussion on myth is badly damaged by failure to differentiate it from saga and Marchen; but I must not lengthen this notice unduly. The book has at least one engaging virtue: it avoids dulness and prosing.

H. J. R.

LINGUISTICS.

The Theory of Speech and Language. By Alan H. Gardiner. $8\frac{1}{4} \times 5\frac{1}{4}$. x + 332 pp. Orford: 72 Clarendon Press, 1932.

This work has aroused in the mind of one reader, at any rate, a welter of mixed feelings in which admiration for the author's analytical subtlety and wide erudition contends with the weariness of the flesh produced by so much hard reading and some degree of exasperation at the author's complex terminology, love of paradox and frequent insistence on the obvious. It is impossible to discuss here all the points that deserve

mention, and if in this notice the choice is made mainly from those that seem disputable, it must be premised that there is a great deal in the book that carries con-

viction and appears to be perfectly sound.

For example, the author (pp. 94, 120 seq.) rightly makes short work of the absurd contention that words have no real existence, but are only abstractions from sentences. But, on the other hand, he paradoxically maintains (p. 69) that they are not objects of sense, but merely psychical entities: "What passes in speech . . . " is mere sound, bereft of all sense." If that were taken literally, without more, the only rational conclusion would be that the reference was not to intelligible words at all, but gibberish. Of course, the author means nothing of the sort; his explanation puts the matter right and justifies the paradox, though hardly the use of it.

Throughout he makes much of the distinction between speech and language, treating it as a sort of master-key to open all doors and straining it somewhat in the proeess. The distinction (which is not a new one) is perfectly real, and careful study of the book as a whole makes it intelligible and acceptable. But a casual reader, who finds on p. 110 that "speech is the sole generator of "language," and on p. 175 that "language is the mother " of all speech," may be puzzled as to which came first, the owl or the egg. The author's fundamental principle that " the sentence is the unit of speech and the word " is the unit of language" (p. 88) seems open to criticism, for it is not really clear what it amounts to. The second half of this statement cannot be taken to imply that our mental store of language contains words but no groups of words or sentences. Notoriously, we have plenty of them in stock (p. 46), though we are also continually making others to order. The matter may well be tested by pedagogical experience. Every teacher of any language knows (or should know) that it is best taught by imparting groups of connected words (preferably sentences) to be memorized by the student. First, because they are remembered much more easily than lists of unconnected words; secondly, they can, if well chosen, be used by the student in actual speech, either as they are or as models for making others of a similar type; and thirdly, they teach him grammar and syntax by concrete examples. That sentences are merely ad hoc constructions, to be immediately dispersed and forgotten (pp. 90, 94, 95) is, to say the least, not universally true. Though, on the other hand, it is not to be denied that a sentence may consist of a single word (the author, on p. 207, even gives to "But ——!" the rank of a 'complete sentence,' which is going rather far), it is only thus that the first part of his principle can be supported. But the semantic units of speech, as of language, are nevertheless the words; and, if we shift from the semantic to the phonetic point of view, we get, in speech, the sub-divisions breath-groups, syllables, and ultimately individual sounds. It all depends on what one means by a 'unit.'

There is a very considerable degree of flexibility in the author's use of his terminology. We are told (p. 9) that all words are the names of 'things,' which here means no more than something or other. But on the very next page, and elsewhere, 'things' are definitely correlated with substantian Paragraphy. lated with substantives. Proper names, like other words, are 'class-names,' the author argues, and gives as a reason (p. 42) that when he recalls the word 'Goethe' it does not suggest to him, as it would, I imagine, to most of us, the great German writer, but merely tells him that he must think of something 'being Goethe'! To me this seems, frankly, incredible. If we heard some one merely mention 'Napoleon,' whem should we think of but the Napoleon? And who would call 'Venice' a class-name? In fact, proper names, except when used

with a plural denotation, are of all words the most individual and substantival. On the same page, however, they are said to be adjectival, because they can serve as predicates, as if nothing else could function in that capacity. Curiously enough, on p. 264, the author says of certain predications that they "are not, of "course, restricted to adjectives." But it must in fairness be mentioned that in his terminology words are (apparently all) adjectival in relation to things (pp. 33, 38, 39). Even the term 'speech,' which at the outset (p. 18 sey.) he would confine to its social aspect, as voluntary and purposeful vocal communication with a listener (which obviously excludes much that is spoken), comes on p. 204 to include gestures and, on p. 67, the sending of a snuff-box to symbolize a request for beer, while on p. 206 it appears that the listener may be a doll, a cat, or nature in general.

But perhaps the strangest of all the author's dicta is to be found on pp. 138-9, where he gives the reason why we speak of a 'horse neighing' rather than a 'neigh hors'ing,' viz., "because the horse is constantly presenting
"itself to us in live form"! One might suggest, as a simpler and possibly truer explanation, that in no con-ceivable circumstances could the expression a 'neigh

'horsing' convey any imaginable sense.

C. O. BLAGDEN.

SOCIOLOGY.

MAN

Matriarchy in the Malay Peninsula and Neighbouring Countries. By G. A. de C. de Moubray.

9½ × 6. ix + 292 pp., 2 maps. London: George Routledge and Sons, Ltd., 1931.

The general subject of this work has already been

much discussed elsewhere, and no doubt a good deal still remains to be said about it. Personally I should prefer to style it 'mother right' or 'mother kin,' for the term 'matriarchy' tends to suggest that it is an exact correla-tive of 'patriarchy,' and may mislead the unwary, particularly if they have at the back of their minds the almost unbounded patria potestas of early Roman Law.

Apart from this terminological point, Mr. de Mou-bray's title does not altogether fit his book. He does, indeed, deal in considerable detail with the customary law of the small part of the Malay Peninsula in which matrilineal descent and inheritance obtain, and he has added a valuable appendix of more than fifty pages, giving the evidence, largely drawn from oral Malay sources, of the actual practice. The second part of his title, however, would naturally suggest a study of analogous customs in Indonesia, and particularly in the Minangkabau region of Sumatra, from which the 'matriarchy of the Malay Peninsula was directly derived by migration in recent historical times. But of this we are given comparatively little, and the only sources referred to are certain of Wilken's articles, which happen to have been translated into English. In a note on p. 11 Mr. de Moubray admits his "very great handicap of not "being able to read Dutch." But that obstacle is not insuperable, and it should have been overcome if the title of the book had to be what it is.

Instead, he gives us an introductory chapter on his method of research, an account of the customs of Malabar (which is hardly a 'neighbouring' country), and a comparative study of the underlying principles and the decay of 'matriarchy,' based on the somewhat limited data indicated. Though this comparison is not without interest, in effect it makes the work rather lopsided. The book would have been a better one if it had concentrated on the Indonesian area and dealt with that more intensively. Even in his own special field, the Malay Peninsula, the author sometimes rests content with presumptive probability instead of pushing his investigations further; but from a statement on p. 6 it would

seem that he hardly had time for that.

None the less, after all deductions have been made, I hold his work to be a valuable contribution to our know-ledge of the subject, though it cannot be said entirely to supersede all the short articles and monographs that have appeared on it, notably E. N. Taylor's Customary Law of Rembau ('Journal of the Royal Asiatic Society,' Malayan Branch, August 1929, vol. VII, part 1), a compendium of judicially decided cases, which should be read in conjunction with the work under review. Of the latter, the most important part in my opinion is its statement of ascertained facts, which I venture to think are best kept quite apart from the consideration of theories of origin, function, and so forth, that are largely subjective and are apt to vary from decade to decade.

A few minor grumbles may be permissible here. Though no stickler for strict uniformity in spelling, I see no virtue in slovenliness or unnecessary variations and am not impressed by the example of Lawrence (of Arabia). If Mr. de Moubray is unable to hear the difference between final glottal stop and h, I diagnose either congenital incapacity or inadequate ear-training. Either way, such a spelling as datoh is indefensible from any point of view. The theory that the devolution of a man's property to his sister's son is a late development of matriarchy in its decay seems to involve the assumption that under earlier mother-right men could have no sort of property whatever. For, as in that stage they had (ex hypothesi) no recognized relation to their children, to whom if not to their sisters' sons, would their weapons (for example) be transmitted at their death?

It is quite possible that in my Introduction to the English translation of Wilken's essays I somewhat overstated the powers of guardianship possessed by a man over the property of which his nieces or sisters enjoy the usufruct; I may have been unduly influenced by the Sumatran customs with which those essays deal. But the term përentah, used in my sources (as in Mr. de Moubray's) to indicate the man's powers, means 'authority,' not 'possession,' as he would have it. It is the usufructuary female that has the possession; but her qualified ownership is subject to several restrictions which distinguish it sharply from ownership in European law; her powers of alienation, for example, are very definitely limited. That fact the author has, of course, recognized.

In my opinion the map on p. 224 errs in putting 'Jelai' in the region of the north-western headwaters of the Pahang river of that name; there is no evidence that I know of to show that matriarchy ever prevailed there. The really relevant Jelai, recorded as early as 1613 by Godinho de Eredia in one of his maps, is in the matrilineal country of Negri Sembilan. And to a person in that country (as to the Malacca-born Malay Abdullah, in his account of his travels) Ulu Pahang means the district of the southern tributaries (Triang and Serting)

of the Pahang river.

I must conclude by concurring heartily in the author's estimate of the high social value of the matrilineal system as it still exists in this small enclave of the Malay Peninsula. Its survival in a Muslim community is strong testimony to its inherent vitality and soundness, and esto perpetua expresses my own sentiments about it.

C. O. BLAGDEN.

The Origin and History of Politics. By William Christic MacLeod. Chapman and Hall, Ltd., 1931. 74

 $8\frac{1}{2} \times 5\frac{1}{2}$, 504 pp. 18s. 6d.

There are two separate disciplines under the title of political science. What it should mean is a comparative study of political institutions, but it

generally means at the present time an evaluation of political institutions, a study which is more correctly termed political philosophy, or the history of political theories. Both political science and political philosophy are doubtless legitimate occupations, but they should be kept severely apart in describing human institutions and their development. Most books on so-called political science lose much of their value because their authors do not distinguish between description of institutions and the formulation of scientific laws concerning them, on the one hand, and ethical evaluation of them on the other hand. It is evident that political philosophy must be based on a scientific study of political institutions, and all the best philosophers from Aristotle onwards have based their ideas upon the analysis of contemporaneous or historical data about institutions, some of it being what we should now call ethnological data. As the data seldom had much objective value, its use was often naïve and unsatisfactory, and could be used to defend or attack almost any theory of the State. One would have thought that the thorough, detailed accounts of institutions of primitive man which ethnological research has now provided would have been welcomed and eagerly utilized by political scientists and political philosophers as a sound basis on which to build up their ideas of the State, both as it is and as it should be when measured by ethical criteria, but up to the present the evidences of modern ethnology have made little impression upon these two disciplines. Professor MacLeod's book is an attempt to remedy this neglect, and it will certainly provide a text-book of value for university courses. Nevertheless, few ethnologists will regard it as a very successful effort to utilize ethnological data. The author is determined to discover the historical origins of the State, a quest out of sympathy with current ethnological viewpoints, and there can be no doubt that his pseudo-historical orientation has largely spoilt his One may trace the historical development of those States which have a history or one may make a comparative study of the political institutions of those States which have no history and try to discover correlations between the political institutions of peoples of the same culture area with other social processes in their culture; but this will not, in either case, and nothing ever will, tell us the historical origin of many of these institutions. It is much to be regretted that the author has thought it necessary to introduce into an account of the institutions of primitive man theories about the origin of customs which are not yet accepted by the majority of ethnologists, and which can never be proved or disproved satisfactorily by inductive research.
E. E. EVANS PRITCHARD.

Life in Nature. By James Hinton. Edited, with an introduction, by Havelock Ellis. London: Allen and Unwin, 1932. 291 pp. 10s. 6d.

Any document which helps us to understand

Any document which helps us to understand the mental evolution of so redoubtable a social thinker as Havelock Ellis cannot be lightly dismissed, as the publishers of Hinton's book observe on the dust cover. Not that 'Life in Nature' lacks intrinsic interest. As a piece of prose exposition it can rank with the most eloquent scientific best-sellers of to-day—even to the frills and arguments ad hominem. Hinton is perhaps less subtle than the moderns, so that the physics and physiology of the earlier chapters stand distinctly demarcated from the naïve quasi-philosophy of the later chapters.

One's first concern, naturally, is to discover Hinton's part in Mr. Ellis's intellectual growth. In a long introduction Mr. Ellis himself gives us a clue. At the time Hinton's book appeared (1862), he tells us, "the universe

"seemed to many only a factory with a deafening "whirl of machinery through which those who desired "to find in it a home wandered disconsolately." Hinton, like his latter-day successors, brought salvation to some of the victims of the clash between science and religion, materialism and idealism, mechanism and vitalism, intellect and emotion—call it what you will—as he himself implies in this book. It is curious to read that the book was "too far aside from the current of thought "of the day to be received with genuine appreciation." But this will add to its interest as a sociological document when the history of the scientific consolation of the unwilling godless comes to be written.

To us Hinton's doctrine will have a familiar ring. The organic and the inorganic form a single unity, he savs. There is no mystery about the fiature of life. The phenomena it comprises are all covered by the laws of physics and chemistry, and there is nothing like a 'vital principle.' This proposition is cleverly substantiated by a consideration of the functions and form of the living body.

But hereupon—like his modern counterparts—he proceeds to stand his system on its head. Not the living organism, but inorganic Nature (hypostasized with rhetorical vagueness) is the seat of the 'spiritual' forces of the universe. Our laws of physics and physiology refer only to an 'appearance'; the finer 'reality' is beyond our grasp.

is beyond our grasp.

Hinton's book certainly deserves to be read, if only to make us reflect how little radical transformation has been wrought by nearly three generations of scientific advance.

M. F.

BIOLOGY.

The system of th

illustrations. 14s.

This book is said to be the first short work which covers the whole field of modern experimental embryology and the concise presentation of the problems is dealt with rather than particular results. It was intended for medical men and biologists, who should be acquainted with the trend of research in this field, while time will not permit them to read the more comprehensive treatises. Anyone who has not specialized in the particular direction is likely to find that this introduction to the subject is by no means easy reading and it can certainly have none of the popular appeal of the writings of Haeckel and his followers. Investigations into the individual processes of development are said to have led to a particular view of its essential nature. Genetic research, other than that which deals with individual processes, also adopts conceptions relating to the nature of development and an attempt has to be made to reconcile these two points of view. Both methods of approach are really concerned with the internal factors affecting the individual and the anthropologist approaches the problem from another aspect since he is essentially concerned with the nature of groups rather than individuals. The task of effectively reconciling and unifying the results of investigations dealing with growth carried out by these different methods is one which has not yet been accomplished. G. M. M.

AMERICA.

People of the Serpent. By Edward Herbert Thompson.

Houghton Mifflin Company, Boston and New York,
1932, 301 pp. 3 dollars 50.

1932. 301 pp. 3 dollars 50.

Mr. Thompson has devoted many years to investigations in Yucatan, and has published certain of the scientific results of his labours elsewhere. The present work is purely popular in character and can

in no way assist students of the subject, while those who have no specialist knowledge but merely wish to take an intelligent interest in it will not be helped by certain confessedly imaginative reconstructions of Maya history which form a rather amusing contrast to the extremely dry records which the Maya themselves have left to posterity. Dr. Spinden is quoted as to the calendar as if his views were final on the subject and, in particular, his theory of the invention of the calendar is given as if universally accepted although, even if Spinden's correlation is well founded, his suggestion as to the inauguration of the elaborate Maya time system must always necessarily remain only a hypothesis.

However, if one does not look to it for new light on the Maya, Mr. Thompson's book is an interesting record of some of his personal experiences in the field as an investigator, and especially his noteworthy exploration by dredging and diving in the Sacred Cenote at Chichen Itza which produced results of the highest value and required great personal courage and

initiative on his part.

It is rather surprising in an enumeration of some explorers who have contributed to knowledge of the Maya field to find the name of Maudslay omitted. But then neither does the author mention Förstemann as a decipherer of the glyphs. RICHARD C. E. LONG.

A History of Ancient Mexico. By Fray Bernardino de Sahagun. Translated by Fanny R. Bandelier. (Fisk University Press: Nashville, Tennessec, U.S.A.) This is Volume I and is a translation of the first four books of Bustamente's Spanish version. It does not contain all of the prologues by the author which are in Remi Simeon and Jourdanet's French translation. There is a useful bibliography going at length into the rather complicated history of the Sahagun manuscripts but, strangely enough, while the French translation is referred to, there is no mention of the great German translation by Seler in which can be found an explanation of the word Tobeyo (Toveyo) which seems unknown to Mrs. Bandelier. One cannot judge of the accuracy of the translation in the absence of the text from which it was made, but no doubt Mrs. Bandelier's great acquaintance with Spanish literature may be taken as a guarantee of its general accuracy. It differs from the French translation in the spelling of Nahuatl names, which are here given in what is presumably Sahagun's own spelling, while Remi Simeon and Jourdanet have reduced them all to a uniform system. On the whole Mrs. Bandelier's method is to be preferred as it is better to give exactly what the author wrote. The English of the exactly what the author wrote. translation is somewhat peculiar in places, judged by the usage on this side of the Atlantic. In particular there is a consistent use of 'forcibly' in the sense of 'being forced' or 'under compulsion.' So far as the reviewer can judge from one American book which he referred to at haphazard, this is not the ordinary use of 'forcibly' in the American branch of the Anglo Saxon tongue any more than it is in that spoken in these islands.

On page 34 there is a surprising error in the words "the month called I 3 calli." The error may be due to Bustamente, but Mrs. Bandelier offers in a note the impossible explanation that it is the feast called Huey Micailhuitl. The Nahuatl text in Seler's work shows that it is Izcalli as indeed might be expected, and it is so translated both by Seler and by Remi

Simeon and Jourdanet.

Sahagun's great work is, of course, indispensable to students of the old cultures of Mexico and Central America, and Mrs. Bandelier deserves their thanks for making it available in English. RICHARD C. E. LONG. L'Ancienne Civilisation des Barreales du nord ouest Argentin. By Salvador Debenedetti (* Ars Americana, Vol. II). Paris. Van Oest. 1931.

In Man. 1932, 29, appeared a notice of the first

In Man, 1932, 29, appeared a notice of the first volume of this important series. Debenedetti unfortunately died before this second volume was published—a serious loss for Argentine archæology. The objects illustrated here are all recorded from the private collection of Benjamin Muniz Barreto, of Buenos Aires, and were taken from two sites in the province of Catamarca, La Ciénega, and La Aquada. Pottery and stone, copper and gold objects were found, but the pottery is by far the most important, and most of the plates are given up to illustrations of a potter's art

comparable in its fineness and delicacy to that of Nazca. The pottery from Ciénega is mainly black, usually with geometric decoration, though the zoomorphic element of design is also represented.

The text is very brief, only 28 pp., of which a good part is taken up by drawings, the main part of the book being the 68 beautifully reproduced plates. From these plates can be deduced the importance of these two sites from the point of view of pre-Spanish cultures in a region now deserted. The author has earned the gratitude of all students interested in South American civilizations by thus making available a knowledge of the designs and technique of these ancient potters of the Hualfin valley.

R. M. F.

CORRESPONDENCE.

Fire-Walking.

Sir,—In view of the articles on fire-walking, Man, 1933, 2 and 48, the following note on the firewalk by Indians in Fiji may be of interest.

There is an estimated population of 75,000 East Indians in the Colony of Fiji. Of these, about 50,000 belong by origin to the United Provinces, 20,000 to Madras, and the rest to the Punjab and the Bombay



Presidency. Approximately one-tenth is Mohammedan by religion, and the remainder, excepting about 1,000 Christians, are nearly all Hindus.

One Sunday afternoon in 1929 at a site near the Suva golf course I witnessed some Indians walk a number of times through a bed of white-hot ashes and emerge apparently unscathed. I regret that my lack of interest at the time precludes an accurate description of the The ashes were heaped up in the centre of a shallow pit in the ground until a few moments before the fire-walk took place. When spread evenly over the pit there would be a depth of about 4 inches of the ashes and the pit or bed was about 12 feet long and 4 feet across. After processing round the neighbouring country during the morning and again in the afternoon, a priest and a number of followers reached the site where the bed of ashes was prepared. They entered a temple close by for a few minutes and then reappeared. They were dressed in *dhotis* only, and the first of them were a tall head-dress wreathed in flowers and he held this on his head with one hand, the other being free. They were all liberally sprinkled with water from a bucket by an attendant, and they then walked deliberately through

the ashes several times from one end of the bed to the other and back again. Their faces were an anxious expression, but they appeared to be quite oblivious to the noise of shouts and drum-beating going on around them and to the presence of the crowd which had gathered to see the show. I was told that it was in honour of the goddess Kali that this ceremony was performed.

KINGSLEY ROTH.

Native Beer in South Africa.

SIR,—There is ample authority for the statement that 'the taste of liquor among the South African 'natives is not a result of Western civilization.'

Dos Santos, in describing the habits and customs of certain tribes, I think, refers to beer made by them from millet. The survivors from the East Indiaman Stavenisse, which was wrecked 'about seventy English miles south 'of the Bay of Natal,' left some record of the tribes with whom they came in contact. In regard to liquor it was said: 'The Europeans considered the beer which was 'made from millet very palatable.' Lichtenstein, who travelled in Kaffraria in 1803-06, wrote, "the Koossas" (Xosas) . . . made from it (millet, Holcus sorghum) a "fermented liquor which tastes almost like beer but of "a much more interienting quality."

"a much more intoxicating quality."

The natives say that the drinking of beer is a national custom handed down to them by their ancestors. As is well known, liquors other than beer are prepared by some tribes. In the sub-tropical areas of Southern Africa a cider is made from the fruit of the Merula tree and a 'wine' is obtained by tapping the sap of certain palms. There is no reason to suppose that the manner of obtaining and the uses of these liquors were

taught by Europeans.

The most common indigenous liquor is beer made from Kaffir corn. Its mode of preparation probably varies in different tribes. In these notes I will confine myself to information obtained in this connection from a section of the Bakoena (Basuto) tribe resident in the district of Matatiele, who state that their national drink, leting, is beer made from Kaffir corn. Beer is also made from maize, but the use of maize for this purpose is a custom adopted from other tribes with which the Bakoena have come in contact.

Leting is called by various names in the different stages of preparation. It is made by the women in the following manner: The Kaffir corn is soaked in water for about 24 hours; it is then taken from the water and spread out, covered and kept moist till it sprouts. After it has sprouted it is spread out in the sun to dry; when it is dry it is mixed with an equal quantity of Kaffir corn which has not been sprouted. The grain is ground, then mixed with boiling water till it reaches the

consistency of thick paste, warm water is added till it becomes a thin gruel; it is then left for about 12 hours, after which it has begun to ferment. It is then boiled till it again reaches its previous consistency of thick paste. Sprouted and unsprouted corn is ground and added to this Sidudu. This causes it to ferment. It is then left for a while till sufficiently fermented, when it is strained with a Mothlotlo—a beer strainer, which may vary in mesh. If the beer is required as food a strainer of wide mesh is used, if as a beverage, a strainer of fine mesh. After being strained the beer is left to ferment for a day or two, after which it is ready for use. The longer it stands the more potent it becomes, but if it is left too long it turns sour and is undrinkable.

The alcoholic content varies according to the brew. No ingredient is added to make it more potent. The drinking of beer takes an important part in most social and ceremonial observances. At a 'beer gathering' the men keep more or less apart from the women, but there is no strict separation of the sexes. Beer should be drunk in public; a man who drinks in his hut alone is despised and looked upon as a glutton; drunkenness is not characteristic. Men do go from one beer drink to

A Solutrean Dagger.

82 SIR,—During the latter part of last year the entire type collection, including flint implements and fauna, from Solutré in southern France, was received at Field Museum of Natural History, Chicago. This collection contains a number of beautiful feuilles de laurier which are so characteristic of the period. There is, however, one specimen (Fig. 1) which is worthy of particular mention, since it exhibits an advanced flint-flaking technique and is formed in the shape of a

The lower portion shows a narrow tapering base, which suggests its use as a dagger, although the finesse of the flaking would indicate that it was used in a ceremonial rather than an utilitarian manner. According to M. L'Abbé Breuil this specimen is of outstanding importance, since it is the only Solutrean dagger which

has been found.

The Solutrean exhibit in the Hall of Prehistoric Man, now under construction in Field Museum, will include casts of the human remains, flint implements and representative fauna, as well as a large painted diorama with a reconstruction of the sculptured frieze of Le Roc, dis-

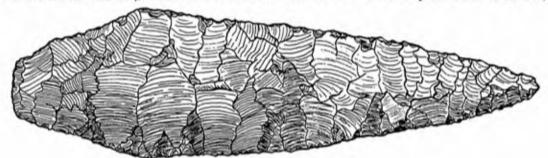


Fig. 1. A SOLUTREAN DAGGER.

another with the purpose of getting drunk, but as a rule it takes a long course of steady drinking to bring about intoxication, this depending upon the strength of the beer.

In earlier times young men and girls were not allowed to attend beer drinks. Parental control has, however, been very much weakened by European influence and young people nowadays do much as they like. Beer is not given to young children under any circumstances.

not given to young children under any circumstances.

When a child is born the women take beer to the mother and those who have attended her in her confinement. This beer is called pitiki and is brought as an encouragement to women to assist at confinements and

Beer is supplied as food and refreshment to hoeing parties as an encouragement to the people to help each other. At marriages beer must be provided by the father of the bride. Where there has been a quarrel between two families beer is drunk to heal the breach. Each family brews its own beer. Those who have become estranged are usually brought together by a peacemaker to drink beer. Tribute is paid in beer in this way; at any important beer drink some of the beer is taken to the Chief as a mark of respect. Beer called leoa* is drunk after reaping and threshing as a thanksgiving. Some of this beer is taken to the Chief.

The information here recorded regarding the brewing of beer and its uses is set down very much as given to me by Chief Jeremiah Moshesh and some of his people.

FRANK BROWNLEE.

* Pronounced 'liwa.'

covered by Dr. Henri Martin in the Charente district of south-western France.

The original natural size drawing of the Solutrean dagger, made by Mr. A. J. H. Goodwin, was copied by Miss Alice Wilkinson, and I must duly record my thanks to them both for their assistance. HENRY FIELD.

The Editor of Man has received from Professor Ruth Benedict, of Columbia University, and from Dr. R. F. Fortune, in New Guinea, long and detailed criticisms of the review (Man, 1932, 174) of Dr. Margaret Mead, 'Growing Up in New Guinea.' As the substance of their complaint had also been sent direct to the reviewer (who was abroad), publication was delayed in the expectation that he might wish to comment on it. To the reviewer's doubt whether Dr. Mead had sufficient field experience to justify her treatment of the subject, it is replied that her account of formal social organization in Manus, and Dr. Fortune's full account of religion among these people (which await publication) will contain ample proof of proficiency. The reviewer is also referred to Dr. Mead's 'Social Organization of Manus 'in B. P. Bishop Museum Bull. 76 (1930) and 'Coming of Age in Samoa' (1928), and Dr. Fortune's 'Sorcerers of Dobu' (1932) and 'Omaha Secret Societies' (Columbia Univ. Contrib. to Anthr. XII, 1932).

The Editor regrets that the reviewer should apparently have overlooked these publications, and especially that his criticisms should have seemed wanting in appreciation or courtesy towards fellow-workers.

MAN

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ORIGINAL ARTICLES.

Plates E, F, G and H illustrate No. 85.

International Congress of Anthropological and Ethnological Sciences. Preliminary Conference

at Basel: 20-22 April, 1933.

With the object of organizing the International Congress of Anthropological and Ethnological Sciences, a preliminary conference was held at Basel on the invitation of the Royal Anthropological Institute of Great Britain and Ireland, on 20–22 April. The local arrangements were kindly undertaken by Professor Dr. Felix Speiser, of the University of Basel.

The Conference opened with an informal meeting of the members at the Hôtel Métropole, Basel,

on the evening of Thursday, 20 April.

The formal sessions were held in the Burgerratsaal, which was courteously placed at the disposal

of the Conference.

On Friday, 21 April, at 10 a.m., Professor Speiser opened the proceedings with words of welcome. Councillor Dr. Fritz Hauser, Director of Education, received the members in the name of the City of Basel, and Professor Dr. Ernst Staehelin, Rector of the University of Basel, on behalf of the University. On the proposal of Professor Speiser, Professor J. L. Myres was elected unanimously to preside over the Conference. Professor Myres returned thanks to the previous speakers, and on his proposal, Dr. Speiser and Mr. Alan Houghton Brodrick were unanimously elected as Secretaries. Professor Myres then gave a brief summary of the negotiations which had led to the present Conference (Man, 1932, 6, 108, 109; 1933, 32).

Professor Myres (Oxford) proposed the establishment of an "International Congress for Ethnic Sciences," to be held at intervals of four years, beginning from 1934, when the International Congress

of Americanists would be meeting at Seville.

Professor Frassetto (Bologna) supported the project for a general congress, but insisted on the importance of maintaining distinct sections for anthropology and for ethnology.

Professor Marcel Mauss (Paris) spoke in favour of a congress for anthropology and ethnology combined, understanding by these terms the whole "science of man."

Professor W. Koppers (Vienna) preferred the establishment of two separate conferences. Professor S. Sergi (Rome) suggested a single congress divided into independent sections.

Professor R. Corso (Naples) supported Professor Sergi.

Professor G. Thilenius (Hamburg) suggested as title "the science of man," or "sciences ethniques,"

but would accept the double title "anthropological and ethnological sciences."

Miss M. L. Tildesley (London) said that in her experience of such meetings there were advantages in fewer and larger congresses. Numerous sections were not incompatible with joint organization. There were practical difficulties of accommodation but they were not insuperable; she preferred a single congress with distinct sections, which would be more convenient for those who were interested in both subjects. A combined congress would not inconvenience those who only wished

to attend one section; and if a very large congress presented difficulties, a solution could be found for them later. Dr. Uhlenbeck (Holland) supported the last speaker, and Professor Mauss repeated his preference for a single congress with two distinct sections.

Professor Krause (Leipzig) spoke at some length in favour of two separate congresses (cf. Man, 1932, 108), but was prepared for practical reasons to concur in the proposals of Pater W. Schmidt

(Man, 1932, 109).

Professor Chevket Aziz (Istanbul) preferred a single congress with two sections. Professor Mollison (Munich), recommended a single congress with two sections completely independent of each other. Dr. Fritz Sarasin (Basel) supported a single congress and called for a division. Professor W. Koppers (Vienna) explained and recommended the proposals of Pater W. Schmidt. Professor H. H. Vallois (Toulouse) said that in his experience in various countries a single congress would give general satisfaction. Professor F. Speiser (Basel), reminded the Conference that it was not authorized to take decisions involving permanent separation of anthropology and ethnology.

Professor Eugen Fischer (Berlin) proposed a single congress for anthropology and ethnology,

but with independent sections.

Dr. C. C. Uhlenbeck (Amersfoort) asked that linguistic studies should not be excluded from the scope of the Conference. The President thought that any study bearing on ethnological problems would be admissible.

Professor Myres (Oxford) pointed out that as the Prehistoric Congress would meet at Oslo in 1936, it was desirable that if questions of common interest were to be discussed at that meeting—and they could not be settled definitively before that date—there should be established forthwith a single congress competent to express opinions on behalf of anthropologists and ethnologists, and to bring these questions before the prehistorians at Oslo.

Professor Sergi (Rome) accepted the double title "anthropological and ethnological sciences."

The President then proposed that "a single Congress should be established for Anthropological and Ethnological Sciences." This was carried unanimously; also that the first Congress should be held, if possible, in 1934 and that meetings should be held thereafter at intervals of four years.

A Committee consisting of the President and Secretaries with Professors Krause and Mauss was appointed to prepare draft statutes for consideration by the Conference at its second session, and the Conference adjourned to a lunch at the Restaurant Schlüssel offered by the Cantonal Government

of the City of Basel.

At the afternoon session, the President invited suggestions as to the place of meeting in 1934. Dr. Uhlenbeck (Amersfoort) expressed his regret that his efforts to arrange for a meeting in Holland had not been successful. Professor T. Thomsen (Copenhagen) regretted that as the National Museum of Denmark was at present being reorganized, it was not possible to invite the Congress to meet in Copenhagen in 1934, but he expressed unofficially the hope that an invitation might be arranged for 1938. Professor Eugen Fischer (Berlin) hoped that at some future time the Congress might meet in Germany. Professor S. Sergi (Rome) was prepared to make preliminary enquiries as to the possibility of a meeting in Rome.

Professor Myres (Oxford) then communicated the formal invitation of the Royal Anthropological Institute to hold the first Congress in England, and probably in London, in the summer of 1934. This invitation has the support of the Joint Committee for Anthropological Research and Teaching, on which all British institutions concerned with these studies are represented. This invitation was

unanimously accepted.

The Draft Statutes were submitted by the committee already appointed, and, with certain modifications, were adopted. They closely resemble those of the Prehistoric Congress.

Nominations were made of representatives of certain countries, on the Comité d'Honneur, on the Permanent Council, and as National Secretaries; and the Permanent Council was authorized to provide for similar representation of other countries.

Votes of thanks were adopted unanimously to the authorities of the City and of the University of Basel, to Dr. Felix Speiser, and to all those who had co-operated in the reception of the Conference.

Professor Thilenius (Hamburg) proposed, and Professor Mauss (Paris) seconded, a vote of thanks to the President for his conduct of the preliminary correspondence and the proceedings of the Conference. The President replied, thanking the members of the Conference for their goodwill.

In the evening the members of the Conference were received by M. and Mme. Burckhardt-Koechlin at their house, 5, Gellertstrasse; and on Saturday, 22 April, those who had not already left for home were entertained at lunch by friends of the University of Basel, after which an

excursion was made into a neighbouring district of the Jura.

The following attended the preliminary meeting at Basel:—Aziz, Chevket (Istanbul); Brodrick, Alan H. (London); Corso, R. (Naples); Eerde, J. C. van (Amsterdam); Fischer, Eugen (Berlin); Fleure, H. J. (Manchester); Frassetto, F. (Bologna); Kleiweg de Zwaan, J. P. (Amsterdam); Koppers, W. (Wien); Krause, F. (Leipzig); Mollison, Th. (München); Myres, J. L. (Oxford); Portengen, Miss A. J. (The Hague); Sarasin, F. (Basel); Schlaginhaufen, O. (Zürich); Sergi, S. (Rome); Speiser, F. (Basel); Thilenius, G. (Hamburg); Thomsen, T. (Copenhagen); Tildesley, Miss M. L. (London); Uhlenbeck, C. C. (Utrecht); Vallois, H. V. (Toulouse); Zeller, R. (Bern).

The following were only prevented at the last moment from being present:—Messrs. Balfour (Oxford), H. Th. Fischer (Utrecht), Fraipont (Liège), Krämer (Stuttgart), Pater W. Schmidt (Vienna), Pospošil (Brno), Rivet (Paris), Suk (Brno), Wehrli (Zürich), Woo (China), and Zupanič (Ljubljana).

In addition the following have expressed in general terms their support of the proposed Congress, and made valuable suggestions to the preliminary Conference:—Ankermann, B. (Berlin); Anthony, (Paris); Beasley, H. G. (Cranmore); Benn, R. R. (U.S.A.); Birket Smith, K. (Copenhagen); Black, Davidson (Peiping), Blagden, C. O. (London); Boas, Fr. (U.S.A.); Bounak, V. (Moscow); Broek, A. J. van den (Utrecht); Bryce, T. H. (Glasgow); Buxton, L. H. D. (Oxford); Bystrón, J. S. (Cracow); Callenfels, P. V. von Stein (Netherlands Indies); Damm, H. (Leipzig); Davenport, C. B. (Washington); Dixon, R. B. (Harvard); Doering, H. U. (München); Drennan, M. R. (Cape Town); Eichstedt, Baron von (Breslau); Feichtney, M. U. (München); Fischer, H. Th. (Utrecht); Gahs, A. (Zagreb); Gates, R. R. (London); Gowland, W. P. (Dunedin); Guthe, C. (U.S.A.); Haddon, A. C. (Cambridge); Hansen, F. C. C. (Copenhagen); Hewitt, E. L. (Santa Fé, New Mexico); Hodge, F. W. (Los Angeles); Hodson, T. C. (Cambridge); Hooton, E. A. (Harvard); Hrdlička, A. (Washington); Hutton, J. H. (Simla); Iyer, Rao Bahadur L. K. A. (Mysore); Josselin de Jong, E. D. (Leiden); Joyce, T. A. (London); Junod, H. A. (Geneva); Kagaroff, E. (Leningrad); Keith, Sir A. (London); Klein, J. (Tartu); Krämer, A. (Stuttgart); Kroeber, A. L. (Berkeley, Cal.); Krogman, W. M. (Cleveland, U.S.A.); Labouret, H. (Paris); Lebzelter, V. (Wien); Lindblom, K. G. (Stockholm); Mahalanobis (Calcutta); Malcolm, L. W. G. (London); Malinowski, B. (London); Marett, R. R. (Oxford); Marro, G. (Turin); McIlwraith, T. F. (Toronto); Mendez-Correa, A. A. (Oporto); Michelsson, G. (Narva); Morant, G. M. (London); Mydlarsky, F. (Warsaw); Nordmann, C. A. (Helsingfors); Obermeier, H. (Madrid); Outhwaite, L. (New York); Petersen, H. (Würzburg); Pettazzoni, R. (Rome); Pittard, E. (Genève); Plischke, H. (Göttingen); Pospošil, F. (Brno); Preuss, K. Th. (Berlin); Rivet, P. (Paris); Rivière, G. H. (Paris); Röck, F. (Wien); Roth, W. E. (Br. Guiana); Sapper, K. (Würzburg); Schermann, L. (Münich); Schmidt, Pater W. (Wien); Seligman, C. G. (London); Sera, G. L. (Naples); Skerlj, B. (Ljubljana); Stolyhwa, K. (Warsaw); Stopford, J. S. B. (Manchester); Struck, B. (Dresden); Suk, V. (Brno); Tallgren, A. M. (Helsingfors); Thalbitzer, W. (Copenhagen); Thurnwald, R. (Berlin); Todd, T. W. (Cleveland, U.S.A.); Uhler, M. (Quito); Waterston, D. (St. Andrews); Wehrli, H. J. (Zürich); Weidenreich, F. (Frankfurt-a-M.); Weinert, H. (Berlin); Westermann, D. (Berlin); Wissler, C. (New York); Woodward, Sir A. S. (London); Zupanič, N. (Ljubljana); also Dart, R. (Johannesburg); Ssossenko, X. (Poland).

Evolution of Art-Forms.

Hornblower.

Early Dragon-Forms. By G. D. Hornblower. With Plates E, F, G, H.

The name 'Dragon' is somewhat misleading, for its original meaning, as all classical students know, is simply a snake; in fact, a winged serpent-form, often merging into a crocodile, lies behind most Western conceptions of what a dragon might be: it is too late to think of a new name, but in using the word 'dragon,' we should bear in mind that it is by no means

appropriate to the Chinese lung or the Tiâmat and other monsters of Mesopotamia.

The conception of monsters blended of various fierce or dangerous animals, such as lion, eagle or snake, is found in the earliest pictorial records of the Near East, and it is most unlikely that we shall ever be able to trace its origin with any degree of historical exactitude, though, proceeding psychologically, we may arrive at some notion of it from the pictorial remains and the literature of the later historical periods. Briefly, we may reasonably suppose that composite animals were pictured to represent concretely the special qualities attributed to each of them: the fierce strength of the lion, the keen swiftness of the eagle, or the mystery and deadliness of the snake. In Mesopotamia such creatures were connected very early with deities (W., ch. viii), and it seems likely that they were intended to convey the idea that the gods were endowed with the combined virtues of the animals included in the composition. The deities are often figured as harnessing their monsters to their chariots or riding on them, as others did on normal animals, such as Ishtar and her lion or Gula and his dog (W., figs. 127-135; M., vol. ii, fig. 434); this kind of association is generally held, for the gods of classical antiquity, to be of a quasi-totemic nature, and may well be so here; in the case of composite animals it might perhaps indicate an amalgamation of early tribes, each with its proto-totemic beast or bird, the combination of which gave rise to the simpler forms of dragon which we find in the earlier periods. But even if this was the case, such an origin must have been entirely forgotten in the course of Mesopotamian civilization, for many different deities besides Ishtar are figured riding on lions, and she herself, as 'the Nude Goddess,' may be carried by a bull (Contenau: 'Les Tablettes de Kerkouk,' fig. 52): it would seem, then, that the association was connected in historical times rather with the superior qualities of the animals concerned. In any case it seems necessarily to point to a primitive account of the dragon differing from that which connected it with the terrible chaos-monster Tiâmat, but, whatever that account may have been, we can never expect to know, for it must have been lost to memory even in the early history of Mesopotamia, as we may infer from the very fluid nature of the dragon which, in one tablet, was described in one line as a lion and in another as a serpent (W., p. 198, quoting from L. King's 'Seven Tablets of Creation,' p. 117). One thing stands out clearly, that the Mesopotamian dragon was a creature both of fear, like Tiamat, and beneficent, as the attribute-animal of a god: its fearful aspect was the most familiar, especially in the group of a hero subduing a pair, one on each side of him, which constitutes the bestknown phylactery of that region. He is commonly called Gilgamesh, whose duty, as protector of flocks, was to drive off wild beasts, but, as Mr. C. J. Gadd has told me, there is no literary authority for this attribution.

The first dragons known to us are of simple nature, composed of eagle and lion, in Mesopotamia, Elam and Egypt (M., vol. i, p. 395; W., ch. viii; C., p. 225, fig. 156). The early Egyptian griffin bears an extraordinary likeness in every detail to the Mesopotamian, which is observed again in the Twelfth Dynasty, in the figures engraved on magic wands of ivory for which Dr. Margaret Murray has suggested a horoscopic use (Proc. Soc. of Bibl. Archael., vol. xxii, 1900, pl. viii, and vol. xxviii, 1906, pl. xliii): in the latter instance human heads were pictured arising from the shoulders of the beast exactly as in Hittite specimens from Carchemish, dated about 1000 B.C. (see Otto Weber: 'Die Kunst der Hethiter,' bd. 9 of the Orbis Pictus series, pl. 14, and cp. a Neo-Babylonian cylinder in the Louvre (D., pl. 36, no. 8); it is not improbable that this form was adopted as an abbreviated rendering of the god riding on his attribute-animal. In Egypt, as in Mesopotamia, monsters often have a beneficent aspect, as the texts on the magical wands above-mentioned prove; the griffin at one time symbolized the king victorious in war (Borchardt: 'Das Grabdenkmal des Königs Sa-hu-rè,' vol. ii, Bl. 2), but, strangely enough, seems to have lost its royal qualities after no great lapse of time, for, besides figuring as a mere instrument of magic, he is further degraded into a common beast of the desert, to be hunted by noblemen for their sport (see, for example, Newberry: 'Beni Hassan,' vol. ii, pls. iv and xiii). This decadence leads us to conclude that the creature's homeland was Mesopotamia, where he flourished greatly in several varieties, throughout ancient history (see R. An., pp. 6 ff). In Egypt the eagle-wings survived, as a symbol, in the winged sun-disk; they were given

also to various serpent-spirits which, like other monsters, could be either harmful or protective—a complex character still attributed to actual snakes by Egyptians as by other peoples: the symbolism of wings took root in the country and was adapted to the great goddesses, who stretched them protectively over a son or a dead husband or brother—Horus or Osiris; in Assyria they are often attached to figures of the national god Assur as he fights with the chaos-dragon Tiāmat.

Tiâmat is generally represented as a kind of fierce griffin, but in early cylinders as a huge snake (W., p. 198, figs. 578-9; and Budge: 'The Babylonian Legends of Creation,' p. 29); the latter version seems to be the earlier, and it may be that when the myth travelled inland to Assyria, and the hero became Assur instead of Bel-Marduk (and before him, perhaps, of Ea or Enlil), the form of the monster changed in sympathy—a suggestion which cannot at present be confirmed, for as yet no early Babylonian cylinders rendering the combat have been found (W., p. 197). As Tiâmat was a creature of the ocean, she should be, at least theoretically, clad in scales, and in fact dragons are often thus depicted, notably the great ones decorating the walls of the Ishtar Gate of Babylon, where they served, of course, for protection; they are griffin-shaped with scaly bodies and serpents' heads with the reptile's flickering tongue (L. W. King: 'A History of Babylon,' p. 51, fig. 13). The dragon in this form was the attribute-animal of Bel (M., vol. i, p. 226, fig. 137); as a griffin it had the same connection with the god Assur, and may be seen accompanying him as he fights Tiâmat, who herself has the same shape (W., p. 199, figs. 567-8)—a scene illustrating strikingly the double nature of the

monster, tutelary in one connection, malignant in another.

Among the strange features of dragon-like animals, the elongated neck is prominent, especially in archaic Egypt, a good example being on the votive palette of King Narmer (C., p. 237, fig. 168), on which are carved the figures of two men holding by a rope a pair of feline animals with muchelongated necks intertwined round the circular depression which held the eye-paint; this group, but with one man only between the animals, was adopted as the nome-sign of Cusæ in Upper Egypt, and survived in that function till the end of Ancient Egypt (see Alan Gardiner's 'Grammar,' p. 439, nos. 38 and 39; cp. also the ivory fragment from Hierakonpolis, C., fig. 98); it seems to have originated, as far as present evidence shows, in Egypt, and to have been the offspring of æsthetic imagination. The pair of feline animals with snake-like heads is also found on the other side of the palette previously mentioned, on which was carved the figure of a griffin (C., p. 224, fig. 155); on another the long-necked antelopes standing antithetically beside a palm-tree (C., figs. 162 and 164) have been identified as specimens of the gerenuk, a gazelle of Somaliland (Brit. Mus., N.H., 'Guide to the Great Game Animals,' p. 39); these creatures, and more especially the giraffe, which also figures on the palette, may have inspired the Egyptian artist with the idea of neck-elongation as an expression of strange, uncanny animal-life. The snake-necked felines appear, like the griffin, on the magic wands of the Twelfth Dynasty and in the hunting scenes of the contemporary tombs of Beni Hassan; it seems evident that the painters of these scenes worked from traditional models, with little knowledge of the actual fauna of the desert among which they included these monsters, while their renderings of real beasts, often vivacious, may have been based on observations of actual specimens in captivity. The elongated neck, though known in Proto-Elamite art (D., pl. 30, nos. 5 and 8), figures but little in Mesopotamian designs; a well-known example in the Louvre consists of two animals, whose bodies appear from the hoofs to be those of bulls, standing opposite each other with giraffe-like necks doubly intertwined, while their long tails cross once, the whole forming a notable continuous pattern; the necks end in dragon-heads (M., vol. ii, p. 631, fig. 435). It is to be inferred from the catalogue (D., pl. 64, no. 9), that its exact origin is not known, as it is an 'acquisition,' but it is classed as 'archaic,' that is, of the third millennium B.C., undoubtedly later than the Egyptian example. The pattern of pairs of elongated animal-necks intercrossed is found also in archaic Assyria, and is illustrated by a cylinder in fig. 70 of Contenau's 'Tablettes de Kerkouk,' where it is applied, oddly, to both animals of the conventional group of a lion attacking a wild goat, the faces of which accordingly confront each other most amicably. In two cylinders in the Louvre collection (D., pl. 68, no. 13, and pl. 70, no. 7), the general effect is that of the Cuse nome-sign, but the elements are different, for here the central figure is that of a Gilgamesh-hero holding a snake-necked lion from each upraised arm, but his legs resolve themselves into the hindquarters of a pair of bulls, the tails of which, in their turn, form the lions' necks, a truly monstrous combination.

On all the earliest cylinders animal figures predominate, principally bulls, lions and mountaingoats; being treated as decorative elements, they are, of course, liable to a good deal of distortion; in many the bodies are twisted, or intertwined with others, usually simply but occasionally in a complicated pattern, after that of the guilloche so common in Syro-Hittite cylinders. This feature is specially noticeable in the specimens from Shurrupak which are largely illustrated by Otto Weber in 'Altorientalische Siegelbilder' (see also M., vol. ii, pp. 616-17): the simple elongated neck is rare and seems to have been originally a native Egyptian feature. With the arrival of Semitic dominance, Mesopotamian art lost its freshness and the animal style ceased, to be replaced by the conventional religious pattern of the Semitic cylinder. The animal style in ancient Egypt seems to be derived from the Palæolithic through the Epipalæolithic, which has left so many traces in North Africa, from Morocco to Egypt, and, across the Straits, in Spain. In Egypt, with its naturalistic art, it held its ground, as it did in North Syria, apparently under Egyptian influence through Byblos. We find it again in Assyrian art, probably under Syro-Hittite inspiration but taking a form of its own, with Babylonian influences. (For Egyptian dominance in North Syria, see M., vol. i, pp. 133 and 136, and vol. ii, pp. 653-5; for Syro-Hittite style, Contenau, 'La Glyptique Syro-Hittite,' nos. 81-87; the griffin in nos. 15 and 22 and the elongated neck in no. 13 afford further evidence of the connections above mentioned.) Egyptian influence on Assyria was probably exercised also more directly; striking examples of it are the symbol of the national god, imitating the Egyptian winged sun-disk and the famous Nineveh ivories in the British Museum ('Guide to the Babylonian and Assyrian Antiquities,'

pls. xli and xlii).

Beyond Assyria were other countries deeply imbued with its influences, of which the most notable was Urartu (Ararat) on the shores of Lake Van, in the region of modern Armenia. This was a vigorous nation, ever a redoubtable adversary of the Assyrians, at one time extending its dominion from Erzeroum to Musasir, but eventually crushed by Sargon II. Musasir, south-west of Lake Urumia, was often vassal to Urartu, but at times her enemy, having been made vassal to Assyria in the course of her recurring raids. The famous eighth campaign of Sargon II, recorded in a tablet published by Thureau-Dangin ('Une Relation de la Huitième Campagne de Sargon'—a reference for which I am indebted, with other help, to Mr. Sidney Smith) brought great spoil from Musasir, then rebellious to Assyria; the recording of the riches captured occupies many lines and gives an astonishing picture of the great wealth accumulated in the chief town-gold, silver, bronze, lead, carnelian, lazuli and other precious stones; goblets and shields, a sword and palace keys of shining gold; silver spears, bows, shields and even chariots and other arms set in silver; silver goblets and incense burners, a silver flower-basket set in gold; furniture in ivory and ebony; bronze cauldrons, etc.—if this rich booty was found in a state generally in a condition of vassaldom, what must have been that of Urartu itself? Some of the designs on the objects seized are mentioned, a winged dragon and shields decorated with heads of dragons, lions and aurochs, pointing clearly to Assyrian influence. This is evident, too, in objects that have been found in Armenia, such as those mentioned by Sayce (C.A.H., vol. iii, p. 185), who refers also to the great, skill in metals shown by the craftsmen of Urartu. The few specimens of sculpture and glyptic that have been found in ancient Urartu display a provincial Assyrian style, rather heavy and rustic, while the metal-work gives evidence of great skill and has been compared with Etruscan bronzes by C. Lehmann-Haupt ('Armenien einst und jetzt,' Bd. ii, H. ii), and E. Herzfeld ('Khattische und Khaldische Bronzen,' in the 'Festschrift' of the last-named author). The latter shows that the influence of Mitanni-Khattite art extended to this region and passed thence to the Medes and later to the Achæmenids. This zone of influence included the hilly country about Elam, in which is situated the modern Luristan, where great quantities of bronze objects have lately been taken from graves, exciting much interest for their novelty and freshness of treatment. No scientific exploration has yet been possible, but M. André Godard has visited the site and published a monograph illustrating a large number of specimens from museums and private collections (G.). He considers them to be the work of the Kassites and to date from the end of their rule in Babylonia and the beginning of the Iron Age; Mr. Upham Pope, who had done so much to

popularize them in the Press, would place them even earlier, but a later date, going well into the Iron Age, commends itself to most Assyriologists, including M. Contenau (M., vol. iii, p. 1580), and seems to be indicated by the finds in other regions where an art of somewhat the same character has long been known, namely, the so-called Scythian art of the steppe country north of the Black Sea and of Caucasia, with its extensions in Siberia and some parts of North-east Russia (R. An. and Ir., and B.). The connection between the northern—or Scythian—region of this art-province, and the southern, by Elam, lies through Armenia, and it is possible, as Herzfeld appears to suggest (op. cit., p. 156), that this was the centre of radiation of the particular style in question, which is best defined as the

'Animal Style,' from its predominant characteristic.

It is clear that Mesopotamian influence prevailed throughout the region, proved in the northern part at a very early date by the finds at Maikop (R. Ir., pp. 19-31), in the southern by the objects from Babylon and Assyria found in North-west Persia and published in the British Museum Quarterly, vol. vii, no. 2, and, later, in both parts, by many details such as the shapes of axes, especially the adze form, the decorated handles of whetstones and the figurines indicating the worship, common to all, of the Great Goddess-but the animal style is the outstanding feature. Nor is this strange, since this chain of countries, lying north to south, was on the path of the various waves of the 'Aryan' southward advance. These conquering people, nomads or descendants of nomads, were keen hunters, delighting in horses which they excelled in training and were perhaps the first to use for riding as well as for draught, thus creating a most valuable instrument for fighting—as the Assyrians well knew. They found in these countries the ancient animal style, moulded under influences from Egypt and Syria, but gave it a new rendering, full of life and vigorous fancy : in the southern region, round Elam, the finds point probably to a great art as yet only divined, not discovered, for the remains so far known come from graves of men below the highest or richest ranks, but it may be hoped that some day the Median plain will yield evidence of the master art to which these point, the predecessor of the Achæmenid, when Persia becomes as accessible and attractive to the scientific excavator as Iraq now is, and that then the immediate sources of the high artistic achievements of Cyrus the Great will be laid bare—the distant sources are well exemplified in the vigorous capitals composed of pairs of bulls' forequarters, the counterpart of a design on a cylinder of Susa II (M., p. 396, fig. 296). The 'Aryan' seems not natively artistic, as is the brown Eurasian-or Mediterranean-race, but when he conquered and settled in an artistic country, his lively qualities, being applied to its art, might produce superb results, as in ancient Hellas.

On the origin of the 'Scythian' art there is no agreement: Minns and Rostovtzeff have proposed a region of Central Asia not yet discovered, while Borovka gives a tempting suggestion of direct descent from a Stone Age animal-art which has been traced from Finland to Siberia; this seems to some critics too remote in time, but it has left specimens exhibiting remarkable resemblances not only to later products of the Bronze Age, but also to the 'Scythian' (B., pp. 77–9, and pls. 68 and 69); to these may be added the finds from Katanda of a still later date, the seventh century B.C., with the wooden horses so like those illustrated by Borovka (J.R.A.I., vol. lv, pp. 37 ff. and pl. xii). The Scythians, then, adopting this ancient animal-style and compounding with it the influences from Mesopotamia which were strong from very early times (M., vol. i, p. 22), formed the animal-style called after them. The strength of the Mesopotamian influence may be gauged by the great prevalence of lion-figures in this art in face of the complete absence of the actual animal from Scythia, as from

its Asian neighbours.

When, at the beginning of the third century B.C., the Sarmatians began to replace the Scythians, the style remained but underwent several modifications, largely through importations from Persia, especially the use, becoming sometimes excessive, of an inlay of coloured stones—a practice which spread through Europe by means of the Goths till it found a distant and splendid field of expression in Anglo-Saxon jewellery (I.L.N., 16 February, 1924).

The southern region of the animal-style, a close neighbour of Mesopotamia, was subject to its influence continuously for many centuries and shows it far more prominently, in the Luristan bronzes; it developed besides a particular characteristic of its own in the elongating convention. It has many points of resemblance with the northern branch, but developed differently on its southward course

through Armenia to the Median plain and its fringes; it was strongly imbued from the beginning with the instinct of animal-representation, but absorbed, when settled, still more of the Mesopotamian spirit which pervaded its new home. Few traces have yet been found of connection with Armenia, but Rostovtzeff has published a remarkable one (R. Ir., pl. v, 4) in a metal clasp, which is an exact rendering of a bronze in a double-lion pattern which was ascribed by him to Cappadocia (ibid., no. 3) from a labelling in the Louvre, now changed to Luristan, as M. Delaporte informs me, in the light of later knowledge. Racial connections between the northern and southern regions are indicated, not only by their art-products, but also by their funerary practices; witness the character of the tombs in the district of Tâlyche, west of the Caspian Sea, which resemble in almost every detail those of Luristan (G., pp. 34 ff.), while some of the objects found in them (G., p. 69, fig. 36) recall

the original animal style derived from the Stone Age art of northern Eurasia.

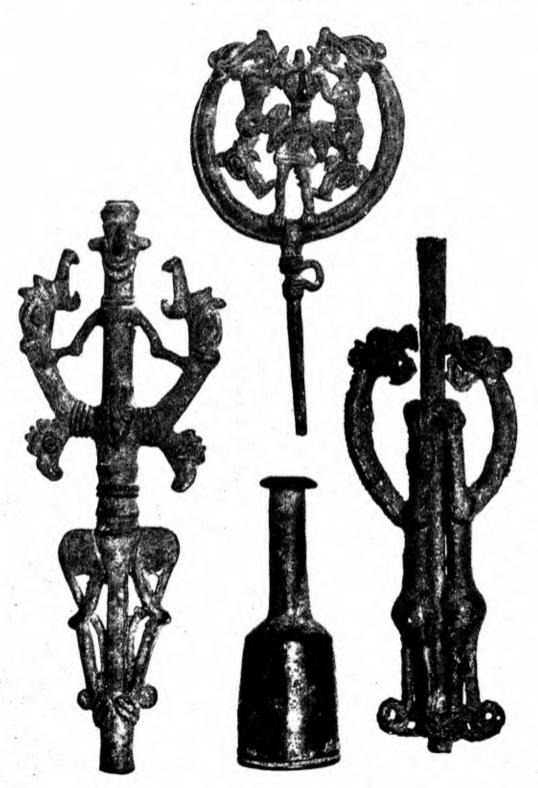
Typical specimens of the elongating style are illustrated in pl. F, from a private collection except the extravagantly decorated pin-head, kindly communicated by the Wellcome Medical Historical Museum. Three of the pieces, though not of the same series, form a group, no. 2 consisting of a central tube (not wholly closed in the lower part) shaped to represent a Gilgamesh-hero subduing a pair of lions which are much stylized and elongated to a dragon form, with a binding round their middle; the exaggerated stylization of the whole makes a striking and highly original pattern; the pin, of which no. 1 represents the head, runs through the central tube of no. 2 and fits into no. 4, which acts as a socket by which to fix the combination on a peg or a pole-top: the pin-head, which is sometimes plain, is always fitted with a loop, from which a thong must have fastened the whole to some piece of furniture or harness; height of central piece, 7 inches. No. 1, of pl. G, illustrates a decorated tube from which the central element, the hero, has disappeared, by a disintegrating process very common in the history of ornament, leaving only a pair of dragon-like lions confronted heraldically, much like those in the belt-clasp from Armenia. The pair of projecting birds' heads in pl. F, no. 2, and the rudimentary face, or head, between them, are noteworthy as having many parallels in 'Scythian' objects: no. 3 displays the great neck-elongation which becomes later a Chinese characteristic.

The purpose of these figures is certainly apotropaic; they seem to be movable, to be set up, as occasion directed, in houses or tents, or fixed on waggons or chariots or, finally, on heads of poles for funerary canopies such as are found in the graves of Scythian nobles: these pole-heads are found in poorer Scythian burials acting as surrogates for the canopy itself, while bits or other pieces of harness take the place of the great horse-sacrifices of the richer graves, and these are precisely the objects found in the Luristan graves, which were evidently those of men who were ardent horse-riders but of no great wealth; the tombs held, of course, arms of various kinds and vessels for food and drink, as in most ancient countries, but these do not concern us here. The bits found vary in size from about 4 inches in width to 10, impossible sizes for actual use and showing that many of the specimens were made simply for funerary purposes. Godard says that the bits with jointed bars and plain branches were those actually used, while those with plain bars and branches decorated with horses or apotropaic figures were only for funerary use and sometimes served as neck-supports for the dead.

The connection between 'Scythian' art and Northern Chinese has been much discussed: Rostovtzeff in his earlier works suggested its occurrence in the later part of the Chou dynasty, but has since found reason to doubt it and to place the introduction of Scythian elements into the art of North China in the succeeding Ts'in and Han dynasties; Pelliot concurs. B. Laufer, in 'Han Pottery Figures,' shows that the Chinese of the Han period had changed their military arms, costumes and accourtements for those of their barbarian neighbours to west and north, of whom the Huns are the best known, and Rostovtzeff has proved that this equipment was of Sarmatian type. Tallgren, in his recent lectures on ancient Siberian culture (1932), showed that that district received no influences from China till the Han period, being till then entirely in the zone of Western influence, and Borovka's explorations in 1924 led him to the same conclusion (B., p. 6)—indeed China had received at least some Western influence, to which the socketted celt bears witness (see C. G. Seligman; J.R.A.I., vol. 1, pp. 154-5, and lviii, pp. 247 ff). When the Ts'in rulers conquered the Chou, 260–250 B.C., they were considered by the Chinese as semi-barbarians since they had mingled much with



POLE-TOP FROM N. CHINA.



LURISTAN BRONZES.





Fig. 3.

Fig. 2.



Fig. 1.



Fig. 2.



Fig. 3.

OLD CHINESE JADES.

the barbarians of the West; in the process they had greatly increased their military strength and found easy the conquest of the decadent Chou. Under Ts'in rule, then, the Chinese must have begun riding horses and changed their military equipment, as Pelliot has indicated (P., p. 14). Later, the Han dynasty which overcame the Ts'in, strong in the new military organization, produced the first native emperors of all China, the pride of their nation which has ever since called itself "the men of Han." A new lease of life then began, not least in the department of art. The literati, according to Pelliot, delighted in crediting all innovations to great men of the period, and the story of the expeditions sent by Emperor Wu to seek the 'blood-sweating' horses of the West is a later addition to the Han chronicle of Sze-ma-ts'ien, taken from a romance (P., p. 14). Authorities agree—and a glance at their illustrations is convincing—that of the Chinese objects displaying Western influence, practically all belong to this military category. The pole-tops used by Scythians for funerary canopies were adapted by the Chinese to chariots and may have been thus used by the Scythians, too; in both cases they were sometimes equipped with bells or rattles, doubtless to strengthen their power of keeping off evil.

Another point brought out clearly from these illustrations is the existence in this new phase of Chinese art of two distinct provinces. In one the chief characteristic is a plain animal-form rendered naturalistically, in the mode of the simpler 'Scythian' figures; this province seems in very direct contact with the 'barbarian' art and is probably the earlier of the two, dating from the Ts'in dynasty; it clearly resembles that part of the 'Scythian' art which is nearest to the ancient animal-style of northern Eurasia, and in fact may be largely derived from that source. A fine example of this style, kindly communicated by Messrs. Loo of New York, is the wild goat in bronze, from North China, 14½ inches high, forming a pole-top, illustrated in pl. E; 'Scythian' influence is specially marked in the elk-like muzzle. Other good illustrations are published in Pelliot's account of the David-Weill collection (P.), and many may be gleaned in various books on old Chinese art, by Sirèn,

de Tizac, Laufer (on Jade), and others.

The second province, however, concerns our subject more nearly. It consists of objects decorated in a foreign style but in a well-developed Chinese manner, and is probably of a later date than the first, in full Han times. It is exemplified in the jades of pl. H, from a private collection. No. 1 (see also text-figure 1), is a scabbard-jade (chih), 31 inches long, of the kind described by Yetts in the Burlington Magazine of October, 1926, and belongs to the class of military accountrements discussed above. The influence displayed is clearly not that of the northern province of the animal-style, but of the southern, as seen in the Luristan bronzes: China, like Scythia and Siberia, has no lions, yet this design has a lion's head which must have been suggested from foreign art; moreover, it has precisely the serpentine form, with elongated neck, so noticeable in the Luristan bronzes; there can be little doubt of its more southern derivation. A bronze of the Han period, pointing strikingly to this connection, has been published by Upham Pope (I.L.N., 22 October, 1932, p. 615, fig. 10); the central figure is a man holding closely by ropes a pair of serpentine dragons, confronted, in a pose very near to that of the Gilgamesh figure and his lions in the Luristan bronzesit is possibly this group that gave the Chinese the idea of dragon-tamers which occurs occasionally in their old books of historical anecdotes. A further development of this kind of dragon-form, of a somewhat later date, is seen in the jade disk (pi) illustrated in pl. H, no. 2—diameter 3½ inches the dragons, one large and one small, have lions' heads and lizard-like bodies, with the hinder parts highly floriated, the whole forming a convention which has taken a strong hold in Chinese art through all succeeding ages; the floriation appears also in the scabbard-jade of fig. 1 (part of the forepaw at the edge of the jade has been corroded by long burial). The floriated serpentine convention entered sometimes into other Chinese figures like that on a bronze belt-ornament kindly communicated by Messrs. Bluett & Sons and illustrated in pl. G, fig. 3-length, 3 inches; it exhibits two interesting details, the dragonish muzzle and jowl of the wild goat, much like that of pl. E, and the curled and floriated hindquarters. No. 2, from the same source, displays the very rare figure of an alligator which terminates in serpentine fashion. In these two figures, of the Han period, as in the two jades discussed above, the essential formative spirit of Chinese art of that time is evident, breaking away from the geometric, dry, style of Chou.

The alligator has a further interest in that it is shown by L. G. Hopkins to have been the earliest form of water-dragon, carved on the oracular bones of the Yin dynasty, which ended 1122 B.C. (J.R. Asiatic Soc., 1913, pp. 545 ff. and 1931, pp. 791 ff.). The lung, or dragon, was always the bringer of rain and so of prosperity and happiness in general; he dwelt in waters and was accordingly conceived in the earliest times in the form of this great water-beast. The alligators on the archaic bone figures are represented with turtle-carapaces on their backs, presumably because the oraclemonger heated plates from such carapaces to obtain signs in the resulting cracks by which he could decipher the dragon's answer to the enquiry addressed to him-which seems always to have been connected with rain. A better-known form of the dragon is the fish, a kind of carp with salmon-like habits at the spawning season (A. de C. Sowerby, in The North China Herald, May, 1932), which is a Chinese symbol for courage and perseverance, for if, after tremendous efforts, he succeeds in climbing the rapids, like a salmon-ladder, of Lung-mên ('Dragon-gate') on the Yellow River, he becomes a dragon. The candidate for Government posts is likened to the fish, and if successful may be presented with a tablet (kuei) carved with the picture of the carp, like the jade, of the Han period, from a private collection, illustrated in pl. H, fig. 3-length, 8 inches: an interesting feature is the dragon-shape of the head, with its evident traces of Western 'barbarian' art. It may be compared with the jade fish-dragons, carved to form rings, which were used in ceremonies for producing rain, and of which a good example is illustrated by Borovka from the collection of Mr. Oscar Raphael (B., pl. 72, B). Bronze objects of 'Scythian' art, exhibiting much likeness to the Chinese jades and bronzes just dealt with, are illustrated by Borovka in pls. 13 and 45, the former from the Crimea, attributed by him to the sixth-seventh centuries B.C., and the latter, by Pelliot-p. 18-in the light of Kozlov's recent finds, to the first years of the Christian era. (See also the illustrations in Yett's article in The Burlington Magazine, August, 1931, and, for the curling snout, an excellent example in B., pl. 60, E.)

The Chinese dragon is of most mixed pedigree and the subject of numberless tales, often exceedingly fantastic; he has received abundant treatment by M. W. de Visser in 'The Dragon in China and Japan,' Verhandelingen der Koninklijke Akademie van Wetenschappen te Amsterdam, Afdeeling Letterkunde, Deel XIII, no. 2, 1913, to which I am indebted for various accounts of the creature (see also chap, ii, of Elliot Smith's 'The Evolution of the Dragon'). Gieseler, in 'Le Mythe du Dragon' (Rev. Archéol., 1917, pp. 104 ff.), is of opinion that the water-dragon originated in the king of fish, the sturgeon, while R. F. Johnston with his long experience in the country, thinks the prototype of the earth-dragon to be the snake ('Lion and Dragon in North China,' p. 386). Waterspouts are regarded as dragons and it is doubtless their occurrence at various spots that has caused the erection of temples on them, to commemorate, with dates, the "appearance of a dragon." In Northern Persia waterspouts are also termed dragons, but with a sense of lively terror, the opposite of the welcome given them in China. The combination of all the elements of which the popular conception of the dragon is composed was fixed in the Han period, in the description quoted by de Visser (p. 70)—all horns, scales, wings and claws—a beast of the terrifying aspect which the Chinese were wont to attribute to the big things of their world, whether dragons, emperors or mighty mandarins. To each part of the dragon's composition a symbolic meaning was attached denoting one of his qualities; the chaotic combination bears witness to the remoteness of the literati who evolved it from the primary sources of the concept, even in their own country.

G. D. HORNBLOWER.



FIG. 1.

WORKS REFERRED TO.

B. Borovka, G.: 'Scythian Art.'

Capart, J.: 'Les Débuts de l'Art en Egypte,' 1st ed. C.

C.A.H.'Cambridge Ancient History.'

Delaporte, L.: Musée du Louvre ; Cat. des Cylindres, Cachets, &c. D. Godard, A.: 'Les Bronzes du Luristan' (Ars Asiatica, no. xvii). G.

I.L.N. Illustrated London News.

Contenau, G.: 'Manuel d'Archéologie Orientale.' M. Pelliot, P.: 'Documents,' no. 1, April, 1929. P.

Rostovtzeff, M.: 'The Animal Style in South Russia and China.' R.An.

Rostovtzeff, M.: 'Iranians and Greeks in South Russia.' R. Ir.

W. Ward, W. H.: 'Seal Cylinders of Western Asia.'

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Prehistoric Domestic Animals. Summary of a Communication presented by J. Wilfrid Jackson,

D.Sc., F.G.S. Manchester Museum. 4 April, 1933.

In Britain, oxen remains have been generally referred to Bos longifrons Owen (= brachyceros Owen-an earlier name), and this has been regarded as the only breed of domestic cattle in Prehistoric Britain. It is reputed to have been introduced in Neolithic times by Iberic herdsmen from Gaul and Spain with the sheep, goat, horse, dog and pig.

Horn-cores of oxen from certain Late Neolithic to Early Bronze Age sites in Britain do not agree with those of typical Bos longifrons from Early Iron Age sites, and may belong to a domesticated

longhorn akin to Bos primigenius as found in some continental sites.

Remains of small horses have been found in several Neolithic sites in Britain, and their association with remains of admittedly domesticated animals suggests that the horse may have been under man's control also.

Further research is necessary before definite conclusions are reached regarding the earliest centre of domestication of animals, and at what period and in what manner such an element of culture

reached Britain.

Much evidence suggests that domestication of certain animals was first accomplished in an Asiatic region somewhere to the north of the Iranian Plateau. Discoveries in Turkestan, Mesopotamia, and other places, provide evidence of early domestication. The people at Anau, in the Aeneolithic period, seem to have had small horses, pigs, sheep and a domesticated long-horned ox of the urus type. Later, they acquired short-horned cattle, hornless sheep, goats, the dog and the camel, probably through trade relations with the East.

There is evidence of a dairy cult in Mesopotamia not very long after 4000 B.C., and domestication

may have been effected centuries before.

The early Danubians possessed domesticated long- and short-horned cattle, sheep, goats and pigs. They appear to have received cultural elements and perhaps some domestic animals from the south-east, and are thought to have introduced these among their western neighbours.

Two ways seem open for the introduction of domestic animals into Britain—trans-Continental

and via the Mediterranean.

It seems well-established that the Beaker-folk first linked Britain to the cultures of Central Europe, and they may have brought some domestic animals with them. But the first introduction of such animals to Britain by the Megalith-builders from the south appears to have much in its favour.

The Influence of their Neighbours on the Bhutanese. Summary of a Communication by R. Edgar Cooper, 23 May, 1933.

The country inhabited by the Bhutanese lies between the lines of 89° and 92° E. on the south side of the east end of the great Indo-Tibet divide—the Himalayas—which sweeps eastwards from the Pamirs in an almost unbroken range of snow-capped mountains to the line of longitude of 95° East. For the greater part of its length the main range is continuous, but where it is Bhutan's northern boundary it begins to become an interrupted chain of short lengths which assume changing directions, and this change culminates in the re-emergence further east of the long north and south trending ranges between which flow the Sanpo, Salween, Mekong and Yangtse Kiang Rivers.

The western part of Bhutan is composed of secondary ridges which stretch south from the main chain to the Indian Plains and the valleys between them. The eastern part of the country consists to some degree of what may be considered the central portions of more extensive valleys that lie between ridges coming south-westwards from Tibet beyond the northern and eastern frontiers. It is interesting to find that a natural barrier in the form of a high, sharp-crested ridge in Bhutan separates

the two areas.

It has been already recorded ('Sikkim and Bhutan,' J. C. White, 1909, p. 13) that the people of the two areas are different in appearance and language, and it would seem that there should be a reason for the differences. The writer spent a considerable time (in two years a total period of nearly twelve months) in wandering in the valleys of Bhutan, and by consideration of photographic records made at the time and such information as could be obtained locally, as well as from the records of previous observers of the history of the adjacent countries, offers the following suggestions in an endeavour to assist further consideration of the anthropological problem presented in this area.

This part of Asia has been subject to many tribal movements, and since it is through gaps in the main chain rather than over a high crested and continuous range (which is an obvious barrier to movements of people southward from Mongolia and westwards from China) that such movements would trend, it is not surprising to find in the eastern valleys of Bhutan groups of people who, while differing from the inhabitants of the western valleys, seem to link in their features and dress the people of the north (Tibet) with those further south (Upper Assam and Burma). The portion of the valleys which abuts on the plains of India about Dewangiri contains people who have an affinity with the Cooch tribes of Behar. In fact, Hajo Hill, near Kamrup—the modern Gauhati—was the seat of the Cooch Rajahs of olden times. Before and after the beginning of the Christian Era there have been several invasions of Bhutan by both Mongols or Tartars and Tibetans.

The earliest Buddhist teacher to visit Tibet passed through the eastern valleys of Bhutan in the seventh century A.D. on his way to the northern country. At this time the religion of Tibet and Bhutan was called the 'Bon.' This was a crude belief akin to the Taoism of China, but was much influenced by the local demonology or belief in unseen powers, both good and bad, credited with considerable ability to control the bodies and souls of its believers. Early Buddhism was also strongly tinged with Tantrik formulæ, but was ultimately modified in varying degree by subsequent

teachers during the next ten centuries after its introduction.

The church encouraged the arts, and its effects show in building construction and decoration. Tibetan pylons, akin to 'Chortens,' with cavities wherein incense is burnt, flank the foot of outer entrances to the main buildings; doorways are surmounted by painted plaster models of heads of mythical beasts; beam ends are carved and worked into continual and artistic friezes; central pillars are extended through the roof to support gilt umbrellas (the sign of religious suzerainty), and walls

are painted with figures of the guardians of the upper and nether regions.

An interesting feature of some very old wall paintings seen in Tashigong Djong in an eastern valley were rows of figures in line, which seemed in their postures related to the original 'Bon' belief as illustrated in Waddell's 'Lamaism,' but strangely enough they were similar to those drawings which are usually considered Egyptian. On another wall in the same building were designs of a fashion seen nowhere else in the country, being traced in gold lines on a black ground. Such a type of decoration is usually associated with the Pathans of the North-West Frontier Province of India, and it might be logical to grant inspiration for these drawings in the Pathan style of Buddhist subjects to the first teacher of Buddhism in Tibet, who, it is reputed, came from the region to the north-west of Kashmir. It is unfortunate that local Bhutanese tradition could give no clue to the history of these paintings.

Temple altar shrines are carved in a manner reminiscent of Chinese carved lacquer work, and they contain images some of which have Mongolian features, but other images have Aryan features, much facial hair and a heavy beard. These are said to portray the first teacher of Buddhism who is mentioned before. The fronts of the shrines are carved in varying degrees of ornamentation. The most interesting example of historical decoration, however, was seen in a country west of Bhutan —Sikkim—where the ornamentation on upright pillars was fashioned into Chinese dragons.

Apart from the effect of the influence of Chinese culture, Dr. J. W. Gregory's examples ('To the Alps of Chinese Tibet,' 1923, p. 87) of the modification of a Chinese script, phrase of happiness, to a decorative form of a mythological beast might help to explain the peculiar appropriateness of

dragons on the portals of a shrine containing the embodiment of peace.

The people of Bhutan may be divided into two main classes, tall folk with long faces and shorter folk with round and flatter faces. Where these two types have come from it is difficult to say, but the former have probably drifted in from the north, while the latter, with their more Mongolian

features, may have come in from the further east.

In the eastern valleys, however, is a region marked on survey maps as containing Chingmis. 'Chingmi' is Tibetan for 'wild' and 'jungle' folk, and various small groups of people were found in this area who differed from both the main types in physiognomy and dress, and who were sufficiently uncultured to deserve the term 'wild.' An interesting feature of their clothes, apart from the fact that the dress of the women seems to approximate more to the smock of some of the tribes of Upper Burma than that of the Bhutanese themselves, was a pudding-bowl hat worn by the men, which was made of coarse felt and had drip tips on its edge. These were five in number, and so disposed as to throw rain water away from the nose, the chest and the back of the shoulders. Such hats were worn by many members of these isolated communities, but one group reputed to come from the vicinity of the Tawang Valley on the eastern frontier of Bhutan had an even more interesting dress feature. The Tawang Valley incidentally contains a track through it from Tibet to India, of great antiquity, and therefore would be a region in which relic-cultures might be looked for. The unusual article of dress was a circular disc of felt suspended from the waist over the buttocks beneath the smock, and this unusual article obtained for the wearers the name of 'tailed folk.'

Through the courtesy of a Bhutanese official, some of these people were induced to visit Tashigong Djong, but although they were photographed and questioned, little information was forthcoming on the history or reason of the tail. The only possibility of a clue for a relationship of these tailed folk, so far obtained, seems to be in 'The Dog-Ancestor Story of the Aboriginal Tribes of Southern China,' by Chungshee Hsien Liu, in Journ. R.A.I., Vol. LXII, 1932, p. 361.

It would seem that the valleys about the eastern frontier of Bhutan, with their odd people and

ancient wall paintings, are an area that would repay further inquiry.

PROCEEDINGS OF SOCIETIES.

AWARDS TO FELLOWS.

Royal Geographical Society.

The Cuthbert Peek Grant has been awarded to Dr. L. S. B. Leakey for his studies on Climatic Changes in East Africa.

REVIEWS.

EUROPE.

The Culture of the Teutons. By Vilhelm Grönbech. London: Humphrey Milford, 1931. 3 vols. in 2, 382, 340, 141 pp. Price 30s.

This book is a revision by the author of an English translation by W. Worster of his justly esteemed book, Vor folkeæt i oldtiden, published at Copenhagen, 1909-12. The new English dress is for the most part seemly; here and there the original Danish shows through a trifle more than is desirable, but never to the point of becoming ridiculous or hard of understanding.

The author attempts a difficult task, for which he is by temperament and training unusually well fitted; namely, to show modern readers ancient customs as they appeared to those who practised them, and thereby to restate in modern terms, so far as that is possible,

the mind of these ancients.

The title is rather misleading, for many things which one would look for in a book on kulturgeschichte are touched on lightly, or not at all; for instance, the economic and ergological parts of the subject. It would be better, perhaps, if the work were called 'The 'psychology' or 'The religion,' or even, though it is a term Grönbech is not over-fond of, 'The mana* of the Teutons.' For a great part of it deals with manifesta-tions of what may fairly be called mana; the people treated of had various names for it in different contexts,

such as hamingja and vé.

Briefly, the author sets to work to make modern readers understand what the circle of kin, the clan, or whatever we like to call it, meant to the Teutons of early date; what was implied in the frith,-peace, bond of union,-between all its members, the honour or luck which belonged to the whole clan (not simply to such members of it as happened to be alive at a given time), and the various implications of such ideas, for example, in the dealings between members of one clan and another, and in common actions taken by the whole community, in peace or in war. He then passes to consider the view taken by the Teutons of the world at large, with the sharp distinction between Middlegarth, which is heore, and the regions beyond its border, which are unheore, uncanny, fit for nobody but a giant or some such creature to live in; the implications of birth and death, and especially the meaning of a genealogy to a people for whom chronology was negligible, since an ancestor of several generations back was still an active member of the clan. The existence of mana-ful objects, such as swords, is discussed at some length and with excellent comprehension; and religious ideas, as shown in ritual especially, receive a large amount of space, occupying the bulk of Vol. II, if indeed they should not rather be said to fill the entire book. To enter into minutice here is beyond the reviewer's competence; the general underlying idea is the vast importance of holiness and the actions which go with a state of holiness, notably at the solemn feast, or ale. Especially Grönbech is interested in ritual of a quasidramatic sort, of which he finds many traces in the surviving legends, particularly in sundry details apparently irrelevant in themselves, which he would interpret as allusions to sacred actions to which the legend corresponds as an aetiological myth; or rather, which repeat again and again the action (such as the creation of the world by the gods) which the myth describes. At times he gives the impression that he is rather too ready to find such traces; but to criticise him properly would need a careful reconsideration of the large amount of material to which he has given expert handling.

For one whose main interests are connected with the classical Mediterranean civilizations, one of the chief virtues of the book is the light it throws on such matters as Homeric culture and certain peculiarities of Roman religion. But to anyone who wants to be shown, as it were from within, the mind and feelings of generations now past and indeed of humanity in general when at a certain level of thought and culture, the book may be warmly recommended, whatever view is taken of certain H. J. ROSE.

details in the treatment.

Hungarian Peasant Customs. By Karoly Viski. 32 illustrations. Budapest : Dr. George 187 pp. Vajna & Co. 1932. n.p.
Dr. Károly Viski does not attempt to give a scientific catalogue of the peasant customs of Hungary,

but rather to attract interest to the festivals and

* Grönbech, in the reviewer's opinion, somewhat hampers himself by his insistence on the idea of mana being everywhere connected with soul; see, for a short statement of his views, his pamphlet Soul or Mana, Copenhagen, 1913. An acute criticism of him and those who think with him in this respect will be found in Archiv für Religionswissenschaft, XXIX, 293-394, by E. Arbman. For example, in Vol. I, p. 127, of the

holidays, and these he describes briefly and picturesquely, giving occasional explanations of their origin and history. The customs of the Spinnery, which few strangers are likely to see, and of the Whipping of the Innocents are very typical. The Matyó Wedding is a queer mixture of the prosaic and romantic. The book is well got up and printed although there are a few errors that might be corrected in another edition. The principal feature is the illustrations from photographs, many from the Ethnographical Department of the Hungarian National Museum. These are beautiful in themselves and beautifully reproduced, the lace work, the costumes and various details of peasant life being particularly clear. Above all the reader will be grateful that, for the many photographs of dresses and customs such as those of the girl carrying the Friend's Basket, the Bethlehem Girl, The Whitsun Queen and others Dr. Viski, in a land of handsome women, has chosen his models with great care and discrimination.

Maltese Folk-Tales. By L. Galea and Margaret A. Murray. Empire Press. Malta, 1932. This little book should be of value to the student of folklore in Malta. It contains a re-issue of five tales published by Father Manuel Magri about 1905 which have been long out of print. As is to be expected in Malta, the themes are fairly universal, but the main affinity seems to be with Sicily and the Italian mainland, the Ægean contributes nothing typical. The second tale, 'The Eighth delivers the King's Daughter from the Drāgun Draganti,' is a model of what a composite folk-tale should be, although the moral seems to have been left out. It writes in a typical Maltan estimated been left out. It unites in a typical Maltese setting the themes of the Disdainful Princess, Circe, the Helpful Animals and the Gifted Companions, Miraculous Birth, the Water of Life and others not fully developed, and above all is a good tale well told. It is noteworthy that the princess combs the lice from the head of the dragon and not from that of the hero, as in most versions of the Perseus legend. The third tale of the burial alive of an aged parent may possibly point to a tradition of such a custom, but in a trade centre like Malta it would be rash to assume that the tradition is native. The last section of the book contains Miscellaneous Folklore and a glossary of baby language, a very useful addition. Father Magri published at least one other booklet of folk-tales, and it is to be hoped that Dr. Murray will make that also accessible to English readers.
H. COOTE LAKE.

NORTH AMERICA: ARCHÆOLOGY.

The Pottery of Pecos. By A. V. Kidder. Pt. I. The
Dull Paint Wares. No. 5 of the Papers of the
South-Western Expedition, Dept. of Archwology,
Phillips Academy, Andover, U.S.A. 111 × 8 in. 166 pp.

This volume is a record and analysis of two groups of wares recovered from the excavations at the ruined pueblo of Pecos and the earlier adjacent site which Dr. Kidder has directed for some fifteen years. Round this site have crystallized many of the more important problems of South-Western Archeology and at it, during

present work, Grönbech enters into a most interesting discussion of what is meant by 'luck,'—a translation which he admits is inadequate when it is used to render such words as féswil, 'having mana for breeding cattle,' sigrewl, 'victorious,' since it connotes chance and the ancient words do not. Mana or orenda would translate it time and again.

the famous Pecos field conferences, major questions of nomenclature, classification and procedure have been thrashed out in the hospitality of Dr. Kidder's camp.

Pecos valley, lying immediately east of the Rio Grande in New Mexico, was always an eastern outpost of the Pueblo culture adjacent to the territory of the nomadic

hunting groups in the Western Plains.

Lying more than three hundred miles to the south-east of the San Juan basin, which appears to have been the cradle of the Pueblo cultures, its sequences deviate from the tentative scheme worked out at the Conference of 1927.

First settled by makers of Black-on-White ware who occupied the upper Rio Grande in the Great Pueblo period and brought with them this ceramic style, then recently developed in the San Juan area, the population migrated towards the end of this period to a site on the low but steep faced mesa which was continuously occupied from about the beginning of the thirteenth century until 1838 and constituted one of the largest Pueblos of the later periods.

The prolonged excavations at Pecos which are unique in extent and scope in the South-west were directed particularly to the investigation of the stratigraphic sequences in the large midden which had been slowly built up below the eastern scarp of the mesa to form a

broadly sloping terrace of debris. Potsherds in amazing abundance provided the material for a detailed analysis of which this is the first instalment. Dr. Kidder has already given a general account of the site and of his excavation methods in his 'Introduction to the study of South-Western Archeology,' and the present volume is devoted to a study by Mr. Amsden of the Black-on-White wares of the earlier site (Forked Lightning Ruin), of the earliest periods of Pecos proper, and of the later painted wares by Dr. Kidder. Glazed wares contemporary with painted Biscuit wares in Pueblo IV and finally ousting them for a short period are, together with undecorated wares, reserved for a later report. In each group detailed analyses of the incidence of various forms, characteristics and decorative types are made. Amsden has prepared a number of graphs based on percentages derived from sherd counts at different levels in test cuts at Forked Lightning and Pecos which show at a glance the numerical variations in the various wares, details of rim form and ornament in successive phases.

The volume is avowedly descriptive and the conclusion is largely devoted to the formulation of problems for that thorough resurvey of the Pueblo area in the light of the present knowledge which Dr. Kidder is so anxious to C. DARYLL FORDE. advance.

CORRESPONDENCE.

Cameroons: Ethnology. (Cf. Man, 1933, 4.) SIR,—Reference, Man, January 1933, "Powell-Cotton: Cameroons; Ethnology." The following

may be of interest :-

I have observed female natives of the following tribes in Northern Rhodesia, indulging in the habit of carrying small stones in the mouth under the tongue :—Yao, Lenje, Soli, Swaka, Lamba, Wemba and Lala. I have not observed this custom in the following Northern Rhodesia tribes :- Chewa, Ngoni, Ila, Rozi group.

My Yao informant informed me as follows:-These stones are usually picked up and sorted out from a stream bed by young girls when bathing and are placed in the mouth at the time of initiation. (Personally observed.)

That they are of an even number, usually six or ten; small quartz pebbles or small greenish hued stones, the size of a pea to a three-penny piece, that they are put under the tongue and divided equally on each side of the root of the tongue. That they are placed in the mouth with the object of checking rapid speech and heated argument (in which they fail!). That they are taken out at night in the dark after the husband (if the girl is married) is in his blankets. They are carried in the mouth throughout life, and it is said that in old women, if looked for, a small pouch is noticed under the chin, caused by these stones.

That if an old woman feels she is dying, she may extract these stones in the presence of her relatives and give them to the daughter whom she loves most, this daughter then takes her mother's name and is promoted to the rank of mother and is called 'Mother.' If not,

they are buried with her.

was also informed that if a girl loved a man she might secretly send him one of these stones, in which case on receipt of the stone he would marry her; if he wished to divorce her at a later date he would show this stone to the girl's mother, who would understand divorce was pending. I was informed that these stones are known amongst the Yao people by the name of maganga gankamwa. By the Wemba people tubwebwi and sakalabwi. I have seen a Lunda woman in the S. Congo collecting

from a stream, and placing these stones in her mouth. In this case they were round tiny quartz pebbles nearly transparent. I therefore suggest that this is a widely spread custom. A woman might carry these stones in her mouth for a lifetime without even her husband suspecting their existence.

I may remark I am not a trained anthropologist; possibly some trained anthropologist may think it worth while to follow up this very interesting and peculiar custom as to its origin, etc. My informants knew nothing about these stones ensuring fertility.
D. GORDON LANCASTER,

Inspector, N. Rhodesia Police.

The Luzira Finds (Cf. Man. 1933, 29).

SIR,-Will you permit me to make a few remarks with reference to the article, "Archmological Discoveries at Luzira," Man, 1933, 29.

The brown colour of the coup-de-poing (p. 27) is due

to patination, in which respect it differs from the other (younger) tools described. Large numbers of this type of coup-de-poing have now been found in Uganda in a definite horizon. They belong to a late Chellean industry with a strong Stellenbosch flavour which appears at the close of the first Pluvial period (mid-Pleistocene).

The account of Biggo by a Mugenyi in N. Buddu (not Budda) that appeared in the Official Gazette, Uganda Protectorate (1909)-vide your footnote on p. 29-is not from my pen. It was written by Mr. D. L. Baines, who was, I think, at that time a District Commissioner. I caused this site to be surveyed and mapped some years ago, but our results have never been published.

The arrowhead shown in Fig. 8 is not made of iron.

but, to the best of my recollection, copper. *
For grave read gravel, last word fifth line from bottom, p. 25. E. J. WAYLAND.

Childhood and Totemism (Cf. MAN, 1933, 62.)

SIR,-Lord Raglan's douches of cold sense are always welcome; they stimulate and refresh but, as I trust he will agree when he hears the details of the case in question, they cannot wash away its simple significance. (I may say I was witness of the episode).

A child of seven, or perhaps eight, playing with a

grown-up friend and rather excited by the activities aroused, cried: "Oh, let's play at bears"—then a moment's hesitation, and then: "but you won't really "be a bear, will you?" with the emphasis on the being. The game was mostly of a bear in a cage, which was improvised from the furniture in the room; the idea of bear " was certainly there and not a thing of mere noise.

To this instance I could add various others, but fear they would be wearisome, for surely most people who come in contact with children could multiply examples of their own and would agree that since irrationality is very commonly observable in children, it may be counted as 'natural,' while playing halma calls on the rationality which is constantly instilled into the child's mind, by life itself no less than by precept. Very likely if the child were to be questioned in cold blood— 'scientifically'—it would, mindful of the rationality growing within, repudiate the possibility of actual animal metamorphosis, and its floating, vague ideas, under the stimulus of the questioning, might gain some more of the firmer outline that is the gift of rationality—not, perhaps, without a little momentary pang for the loss of one more source of romance. G. D. HÖRNBLOWER. one more source of romance.

Arunta Language: Strehlow v. Spencer and Gillen. SIR,-In any controversy it is usually possible to convict one side on its own evidence.

try and decide this case. On p. 305 of 'The Arunta' Spencer and Gillen give a list of nineteen sentences illustrating the use of the word altjira, or, as they spell it in their unsystematic

way, alchera.

In No. 4 Spencer makes mia mukwa tmara alchera mean 'the alchera camp of my mother,' alchera being the 'mythical age.' If that is correct then 5, tmara nukwa alchera should be 'the alchera of my camp,' but that does not fit the meaning 'mythical age,' so, regardless of the order of the words, he translates 'my alchera camp.' In 8 things become more serious: Alchera Numbakulla rulla umbairaka is rendered 'In the Alchera Numbakulla made the country.' Where does he get his 'in'?
According to his other examples Numbakulla is in apposition to Alchera, and to be consistent we should understand 'the Alchera Numbakulla,' Numbakulla being an adjective or a proper name. In 12 he translates Numbakulla Alchera just as he does Alchera Numbakulla : the order of the words does not trouble him in the least. In 15, again, yinga Alchera nukula is rendered 'I lived in the Alchera.' Again where does the 'in' come from?

According to Spencer and Gillen the Aranda merely string words together, and you have to guess the relation in which one stands to the others. If we turn to Strehlow's long and carefully recorded texts we get a very different impression of the language. It there appears with a fixed order, with locative, accusative of direction, infixes, and a structure not unlike Fijian on the one hand and Dravidian on the other. Our preposition 'in,' whether in time or space, is expressed by the termination -la. 'In the altjira' would therefore be altjirala; but there is no -la in the examples. Then what right has Spencer to put one in? Because he has made up his mind that alchera means 'mythical times,' and he translates according to the meaning he had guessed, and not according to grammar. His methods are those of Smith minor: pick out a word here and there, and guess the whole. No wonder that when he went back to check his previous account he found that it "was correct in the main"; for he translated in accordance with his previous opinion.

If, on the other hand, we accept Strehlow's translation of altjira as 'god' we can translate all Spencer's examples quite consistently without doing any violence to the grammar. Thus 4 becomes 'the god's camp of my mother'; 5 'the god of my camp'; 8 'the god Ngambakala made the country'; 12 'Ngambakala the god existed'; 15 'I existed as a god.' We not only get reliable evidence on Aranda theology in the words of the natives themselves, but we can set up the following equivalences:

Ar. altjira = Fijian vu.

Ar. tmara vanua (in the sense of the ** sacred land).

vanua vu (god's land); Ar, tmara altjira = ** Ar, altjira tmara = vu vanua (land god).

The many affinities of Fiji and the Aranda are thus extended, by a correct translation of the texts.

Surely it makes all the difference whether you understand a people correctly or not; but the partisans of Spencer and Gillen, unable to dispute Strehlow's command of the language, take refuge in the objection that he never saw the ceremonies, while Spencer and Gillen did. I will just ask them this. Who is the more valuable witness as to the Mass? The man who has attended its celebration, but knows no Latin, and knows too little of the priest's own language to be sure he has understood aright their conversations on original sin, atonement, sacrifice, etc.; or the man who has never been able to attend, but owns a missal, knows his Latin, and is able to read authorities on Christian ritual?

After all, the natives know their ceremonies best, and are best able to give an account of them. They know them from the inside, not merely the outside. means witness them, if you can, in order to check, not them (they are honest enough), but your own understanding; only realize that to see is useless without a commentary by the natives, and that you must be sure you understand. An eye-and-ear-witness is best of all; but if we cannot have both, let us have the ear-witness, for the mere eye-witness is useless, and sometimes worse

than useless.

Few field-workers seem to realize the importance of understanding exactly what is said. A rough approximation they consider good enough, forgetting that in science a miss is as good as a mile.

It has of late been the fashion to belittle Rivers because he worked through interpreters. He was the first to recognize that this was only a second best, but he had the sense to realize that language was his weak point, that a little knowledge is a dangerous thing, and that you must either know your grammar or use an interpreter. Spencer and Gillen are not the only observers who have fallen between two stools: the literature to which anthropologists trust is full of things A. M. HOCART. seen and misunderstood.

CORRECTIONS.

Man, 1933, 35. For "He was married in 1895 97 "to Hannah, daughter of Sir Robert Lorimer of "Edinburgh University," read "to Hannah, daugh-"ter of James Lorimer, Professor of Public Law and the " Law of Nature and Nations in the University of Edin-" burgh, and author of many works on International Law " and Scientific Jurisprudence."

Sir Robert Lorimer was the youngest brother of Lady im Thurn, and was the architect of the Thistle Chapel

and the Scottish National War Memorial.

MAN, 1933, 66. Early Human Remains in East Africa. Report of a Conference at Cambridge. Africa. Report of a Conference at Cambridge. To the list of those who were present and concurred add Dr. Felix Oswald and Professor W. J. Sollas.

		1

MAN, JUNE, 1933.



Fig. 2. FACE OF FIGURE. Scale three times that of Fig. 1.



Fig. 1. UNDERSIDE OF THE CAPSTONE.

DÉHUS DOLMEN, GUERNSEY.

From Flood-lit Photographs by Florence Ayscough.

M A N

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Ayscough.

ORIGINAL ARTICLES.

With Plate I-J.

Archæology: Channel Islands.

Military and a second second

The Use of Floodlighting in Archæological Photography. By Florence Ayscough.

The Austrians have a proverb: 'when needs must the Devil eats flies.' It sprang to my lips when confronted with the problem of photographing the schematic figure on the under side of capstone two, in the Déhus Dolmen, Guernsey. I knew that Col. de Guérin had discovered two eyes, a mouth, two hands, a circle, a straight line and a strange figure, which might be a weapon of sorts, to be scratched upon the stone, but by day they were very difficult to see; and to photograph them was out of the question. No one had ever attempted such a hopeless task and the only representation of the figure was the diagram drawn by Major Carey Curtis: see T. D. Kendrick 'Archæology of the Channel Islands,' p. 28.

The only course open to me was to determine what could be done by night. The effect of carefully controlled lights was amazing. The Guardian of the Tomb, if such he be, seemed endowed with life

and his expression became extraordinarily mobile.

After many experiments my very able assistant and I evolved the following method of procedure: we ran two spot lights from the car (these being, of course, attached to long flexes), and after we had decided upon the most advantageous position for these lights, hung them upon two tall poles, A and B. The reason we used two lights instead of one was that we did not wish to disturb the shadows at the point where the join in the mosaic photograph must come. After the first exposure, A light was moved from left to right of B, then B was moved from left to right of A, and so on until all the necessary exposures had been made. We diffused the lights as much as possible with white muslin shades and kept them moving throughout the exposures to avoid 'streakiness.' In fact, the diffusion of the light is the most important and the most difficult part of the whole business. It is impossible to avoid a certain unevenness of exposure, as in order to throw the faint scribings into relief the lights must be held practically on a level with the edge of the stone. The near edge is then over-illuminated, while the portions farther away do not get sufficient light. The result can, of course, be corrected to a certain extent by reduction of the negative, but from the nature of the case a perfect result is, I think, impossible to obtain.

As, in the Déhus Dolmen, the ground is only six feet below the stone, it was necessary to use a wide angle lens, to focus by measurement, and to determine the absolute plane of the camera by means of a spirit-level. It would, I suppose, be possible to obtain a result by the use of flashlight, but we prefer to give a ten-minute exposure with fixed lights, as thus we can control the shadows and

be sure of our effects.

I have used this system of floodlighting for photographing erect stones and find it equally satisfactory, as many details, unnoticed by day, spring into prominence.

The oblique light revealed in the Déhus a number of hitherto unknown workings on the stone.

In the first place, careful percussion on either side of what are apparently natural ridges has produced a definite nose and heavy arched eyebrows.

Secondly, careful percussion has been used about the mouth and chin where definite ornament is shown. The ornament seems to be a beard, heavier on the left cheek than on the right, which factor, combined with the circumstance that the distance between mouth and eye is less on the left side than on the right, gives the effect of a face slightly turned. It is interesting to note that this turning is towards the entrance. The figure seems to be watching anxiously.

Thirdly, the wide portion of the stone was shown to be covered with typical dolmenic scribings. As in Brittany, each tomb seems to be decorated with some dominant 'motive,' so in the Déhus a certain hooked design predominates. As in Brittany, the meaning of the scribings is obscure, so in the Déhus are they unintelligible. One marking resembles the supposedly anthropomorphic designs on the standing stone at Carao, in Abamio, Spain, and it is possible—although doubtful—that the figure I refer to represents a man with his arms in the air.

Le Commandant Octobon, author of 'Statues-Menhirs, Stèles sculptées, Dalles gravées,' is much interested in the photographs which I have sent him, and suggests that the figure carved on the under side of the Déhus Dolmen is of the same type as those at Collorgues, which latter he considers to be 'Guardians of the Tomb.' In any case the most important beakers at Déhus were found by F. C. Lukis in his excavations of 1847 (see 'Archæology of the Channel Islands,' p. 145) under this capstone beside a ritual pillar, rather like the one at Bryn Celli Ddu, which is also placed within the tomb.

Miss Edith Carey suggests the possibility that this placing of an anthropomorphic figure in a horizontal position over the dead points to the early existence of a cult, possibly the prototype of that followed in the catacombs at Rome, where the portrait of Christ has been found placed in a similar position. (See 'The Times,' 24 December, 1932.)

The Déhus Dolmen has lately been re-excavated by Miss V. C. C. Collum at the instance of Sir Robert Mond, and is now being repaired by the States of Guernsey. A fine peristilith has been laid bare, the tomb is being covered by a tumulus of earth, and electric light is to be installed. This will enable visitors to study, and possibly decipher, the scribings on the second capstone, while the unique and fascinating Guardian of the Tomb will then be visible by day.

Guernsey is already noted for two unique monuments: the statues-menhirs of St. Martin de la Bellouse, and Ste. Marie de Castro; and now the Dolmen of Déhus will take its place as a third.

FLORENCE AYSCOUGH.

CEYLON: Religion.

Codrington.

An Act of Truth in a Cingalese Court of Law. By K. de B. Codrington.

On 5th February, 1932, in the Gampaha Police Court, the hearing was resumed before the Police Magistrate of a case in which the police charged four defendants with the theft of a gold bangle and various degrees of assault upon Mr. John Dias Jayawardene, his wife, Alice, and his daughter, Pearl Margaret Jayawardene, or with aiding and abetting the alleged offences. The case was confused from the start by the fact that the constable on duty at the police station did not take down Jayawardene's statement immediately on his arrival at the station, after the commission of the actions complained of. Counsel for the defendants was, furthermore, able to produce a substantial series of charges in which the Jayawardene family in its ramifications were, or had been, prominent in one way or another. He finally asked Jayawardene if his wife was the mistress of a planter at Gampola. This was denied emphatically and was followed by questions as to how she came by certain property at Gampola. Jayawardene, admitting he had been married over 25 years, said he did not know. Under pressure, he admitted that his wife said that a planter had transferred the property in question to her for adopting a child. Mrs. Jayawardene later said that she had never been a planter's mistress, but that her sister had been. She, however, knew nothing about the birth or adoption of any child. Her property was derived by gift from her father; she could produce the deeds. She admitted that she had never shown them to her husband. This the magistrate found hard to believe. However, the witness persevered and added that she had not only never told her husband about her property nor mentioned any planter's child, but that in fact she had never had anything to do with or even heard of any adopted child.

The magistrate then ordered Jayawardene to ask his wife the following question: "Hamine "(lady), dressed (as you are) in a red sari, did you not tell me this?" He, however, avoided the test and asked: "Why did you not tell me this?" The magistrate then ordered Mrs. Jayawardene to ask her husband: "Appuhamy (lord), dressed as you are, and wearing shoes, why do you tell lies?" Again the test was avoided and the substitute question: "Did I not tell you so?" was asked. Both replies elicited laughter in court from an appreciative public gallery. The case is reported (somewhat inaccurately) in the Ceylon Independent of Saturday. 6th February.

The test here applied by an astute magistrate is closely paralleled in classical Indian literature, by what is known as an 'Act of Truth.' References are plentiful in the indices of the Cowell and Rouse Jatakas and of the Kathasaritsagara (Penzer Ocean of Story). In Pali it is known as Saccakriya, which is transposed into Sanskrit by Böhtlingk-Roth as Satyakriya. It is also called 'Truth-Command' (Sanskrit, Satyadishthanam), or 'Truth-Utterance' (Pali, Saccavacana, Sanskrit, Satyavacana). The general types of Acts of Truth are discussed by Burlingame in J.R.A.S., 1917, p. 429, and the whole subject is dealt with in the notes of The Ocean of Story. The common forms of declaration "—as there's a God in heaven" or "— as I'm sitting here," serve to distinguish the essential of all types of Acts of Truth from common oaths.

As a typical example of an Act of Truth, Damayanti's speech in the Mahabharata may be quoted. To the gods who are impersonating Nala and so confusing her marriage choice, she says: "If it be "true that on hearing the voice of the swans, I chose Nala for my husband, that I am loyal to him in "thought and word, that the gods ordained him to be my husband and that I undertook this choice for the purpose of winning him to be my husband, then let the gods point him out to me and resume "their own true forms"—an appeal to the truth of a special virtue of the speaker, which is paralleled in II Kings, i, 10, where Elijah says to the captain of fifty: "If I be a man of God, then let fire come

" down from Heaven and consume thee and thy fifty."

It is abundantly clear that the bulk of the 'Acts' preserved in literature do appeal to some special virtue, especially to wifely or maidenly virtue, and to Ahimsa. But the essential idea is simpler than that. Indeed, the power lies in any statement that is true and any fact may be made use of. For instance, the Buddha makes an 'Act of Truth' by the existence of a lake (Divyavadana, 611): the royal paternity of a child is proved by making an Act upon its alleged paternity; thrown by one foot into the air, it sits cross-legged (Jataka No. 7) before its royal father. Maternity is used in the same way in a Cingalese folk-tale (Parker, Village Folk-Tales of Ceylon, vol. iii, p. 63). In a Santal folk-tale (Bompas, p. 266) a bogged cow curses a man "... the moment you touch your newly married wife, you shall turn into a donkey." The translator writes "because you have refused to help me," but the causation is actually secondary to the fact. The progression towards morality is, of course, inevitable. If facts have this great power, then the facts that a man creates, his acts, will have their consequences. The original appeal to the plain truth is, therefore, overlaid by ideas of rewards and punishments. In India the more primitive idea is enshrined in the conception of Dharma in all its ramifications, and of the Vedic Ritu ('fitting, right, established order, rite': Macdonnell). These both comprise acceptance of a pre-ordained causative cycle or series of cycles, any departure from which, or rather obstruction of which, is evil, and also foolish, for the pre-ordained cannot be really obstructed. This again bears upon the Indian conception of the divine hierarchy, for individual merit can, and in the Jatakas repeatedly does, compel the god to descend upon the scene and take effective action. The phrase runs that owing to such-a-one's unparalleled merit, the god's seat grew warm. . . . The power of Yoga, though less naive, is of essentially the same quality. To know is to be able to control all things and knowledge is a statement of truth. Hence the aphoristic style of Indian philosophy.

It may therefore be suggested that the 'Act of Truth' in its most distinctive form is a plain statement of fact, dependent for its efficacy upon the power which the facts of the past have upon the facts of the future. A lie is not immoral, but it endangers the whole contingency of life by putting the liar outside the pale of routine existence, in the outer obscurity and insecurity, where nothing is certain and anything may happen. The intrusion of the idea of personal virtues into the plain statement of fact introduces an element of the magical, which is wholly extraneous. These good wives and maidens drag in their superiorities quite unnecessarily from the point of view of the essential 'Act of Truth.'

They are nearer akin to Mary, in the carol, appealing to the cherry-tree which bends before her, and to numerous heroines of folk-lore. The *Ahimsa* idea, the hero or heroine who has never harmed anything in all the world, is of the same kind. It has nothing actually to do with the case.

It is interesting to note that in the variety of an 'Act of Truth' here reported, the appeal was to the simplest facts, not to morality. Furthermore, the two protagonists of the magistrate's tests were Christians from birth. Their previous evidence was, of course, upon oath. This successful substitution of an 'Act of Truth' for the oath suggests many interesting points. It is probably true that, in most cases, to swear by the god is to expose oneself, for personal or public reasons, to his rewards and penalties. The common type of oath which enumerates the penalties at length, makes this clear. It is also obvious that many engagements are entered upon and fulfilled by standards of personal or social honour. These standards may be wholly personal or wholly social, the distinction lying in the difference between paying the milk-man, who has to compete for custom and has his living to make, and paying a club card-account, between private and public life in general. In certain cases an oath by the god, owing to sectarian esprit-de-corps or local affection, is actually, to all intents and purposes, only a personal or social pledge. In all these cases rewards and punishments are prominent. The declaration "as there is a God in heaven" is intermediate between the oath proper and an 'Act of Truth.'

In an 'Act of Truth,' strictly speaking, there is no possible reward or punishment. Personal relationships are not concerned. The formula is used purely scientifically, but, of course, the experiment may fail shamefully. Under Buddhist influence the morality normally works out right, but not always. In Jataka No. 62 a faithless and suspected wife volunteers to submit to the ordeal by fire in order to prove that no man's hand but her husband's has ever touched her. She makes an 'Act of Truth' in these terms so that the fire may not hurt her, but nullifies it by arranging that her lover shall burst through the crowd as she approaches the fire and seize her hand, crying: "Shame on the "man for making such a woman enter the fire!" There are other stories of similar tricks.

It is a little difficult to account for the origin and spread of the 'Act of Truth.' It is still more difficult to account for its survival in Ceylon to-day. It was perfectly evident that the process was known to everyone in court, but with what associations it is impossible to say. The existence of the trick 'Act of Truth' stories displays a sceptic vein; the romantic intrusion of virtue alters the case entirely. I doubt very much if the literary versions have affected the living tradition at all. It seems to be based upon a fear of the spoken untruth, as being a denial of the contingent in which personality is implicated, a sort of reflex action or retribution of the outraged objective upon the outrageous subjective. Positively regarded there is no power in truth, except in a moral sense. It is understandable that to identify oneself with that which is not, is dangerous; everyday life is identification with that which is. This is the phraseology of the Chandogya Upanishad, vi. 16 [also J.A.O.S., xxxv, 245 f.], where, however, truth has magical powers in association with the ordeal by fire. "But if he be innocent "...he makes himself to be the truth [by speaking it] ... uniting himself with Truth, he grasps the heated axe... He is not burned; he is freed." But this magic is an extension of the basic idea.

K. DE B. CODRINGTON.

Africa: Sudan. Palmer.

Triliths in the Sudan. By His Excellency H. R. Palmer, C.M.G., C.B.E., Governor and Commander-in-Chief, Gambia Colony.

Mr. Francis Rodd's note on 'Tridents and Triliths' (Man, 1932, 162), encourages me to add to my note on the same subject (Man, 1932, 47).

It should be explained first of all that by 'trilith' I meant 'three stones,' either without or with a covering stone, as in Mr. Rodd's illustration, and I had in mind that the cover (the fourth stone in the illustration) might not necessarily be a stone. My idea was that the original cultural significance of the 'trilith'—preceding its later use with a cover as a 'symbolic seat' (the fourth stone), was in the Sahara derived from, and intertwined with, the ordinary every-day use of three stones as the 'hearth' where the fire is lighted; and thus that the sacredness which attaches to the 'trilith' was ultimately due to its being the place of, or 'seat of,' the god, i.e., the fire-god, who among the Teda and Kanuri is still called 'Midila,' while his 'seat,' circa A.D. 1200, in Kanem, was

called 'Mataba(r)' or 'Mataba(s).' Variant names for this same deity, such as Aman, show that the conceptions of 'fire-god,' earth-god,' and 'sky-god,' respectively, were not kept distinct among the people of mediæval Kanem; and that various attributes of the Kanem 'Midila' or 'Aman' were due to syncretism of the attributes of deities of the Eastern Sudan, among these being probably the Blemy 'Mandulis' or 'Madulis' and the 'Aksumite' (Medr). The former is ordinarily classed as a sun-god, or fire-god, the latter as an earth-god.

That Mr. Rodd, in 'People of the Veil,' is right in holding that the Tuareg veil is in origin a ritual observance is hardly open to question, for apart from direct evidence from custom, etc., the Muslim author Ya'akubi speaks of the veil being the 'sunna' of the Lamta (Tuareg), while Ibn Jubair goes so far as to call it 'ihram,' i.e., a dress corresponding to the sacred dress worn by Muslims during the ceremonies of the pilgrimage to Mecca. Moreover, of the two ordinary Arabic words which denote the Tuareg veil the root meaning of one litham is 'to kiss,' i.e., 'to worship,' while the other izar connotes

'protection' or 'strengthening.'

If, however, the 'veil' is ritual in origin it must have been originally connected with some definite cult or ritual. No known ritual seems to fit the circumstances better than that of Mithras, as illustrated, for instance, in Cumont's 'Religions Orientales dans le Paganisme Romain,' 1929, p. 135, where two Magi are shown wearing veils very like those of the Tuareg. Certain illustrations in MacIver

and Woolley 'Karanog' also suggest that the 'Noble Blemyes' may have worn veils.

But if the rites of Mithras can account for the Tuareg veil imawal (I am indebted to Mr. Rodd for a certainly correct translation of this word as 'mouth-wrapper'), it may also explain the word which in parts of the Southern Sahara, at all events, is a variant of imawal, namely, timedr, as being the 'thing of' or property of 'Mithras' (Medr). But the acceptance of such an explanation would firstly make it necessary to accept Ibn Khaldun's statement and implication that the Tuareg spread west from the rif of Abyssinia to the Sahara at some later date than the opening of the Christian era, and, secondly, would involve the assumption that the covering of the mouth as a sign of high rank, which is the common convention from Abyssinia to Senegal, is due to the same ultimate religious influence.

That this latter convention, of which the Tuareg veil is only one manifestation, was brought to Africa from Asia about the time of the opening of the Christian era seems most probable, as also that this convention first took root in Africa at Meroe and in Abyssinia and the Eastern Sudan generally. Idrisi, in 1150, particularly stressed the wearing of the *izar* (veil) at Aswan and along the Red Sea coast. Ibn Suleim al Assuani, towards A.D. 970, stressed the former predominance of sun-worship in these same regions.

Going back to the time of Strabo, 23 B.C.-A.D. 70, the dominant caste in much of the Eastern Sudan was the so-called Sembritæ, Automoloi, or 'Ασμάχ, the descendants of the Pelusiac garrisons

who had marched south towards 580 B.C.

The Sembritæ were held by Maspero to be Libyans. The Libyans, again, according to Sayce, were ethnically similar to the Amorites of Syria.

The physical traits of the Tuareg, their language, and their customs can all be readily accounted for if—

 Sembritæ = San²-Baridæ (compare San-Taria, Bardoa, etc., in the Nubian desert in Arab times and modern San-Dala (Kelowi)).

(2) 'Aσμάχ = Asmagha (the caste of Mahra, Samhar, or Asmara).

(3) Automoloi = (Ait)3-imillan = 'lords' or 'nobles' (cf., Babylonian Amelu 'nobles').

The Greeks very commonly, like the British soldier, turned names they did not understand into names they did. Herodotus' Nasamones for Anu-Saman is one instance, and Automoloi appears to be another. (Ait)-imillan 'nobles' of the (San) Baridæ (Bardoa) would correspond to the later $\partial \psi i \gamma o voi B \lambda \dot{\epsilon} \mu \mu \nu \epsilon_S$ of the same region, whose appearance created such a sensation at the triumph of the Emperor Probus in A.D. 280.4

Mauteba was the name of the 'divine seat' in Nabatean inscriptions. See S.A. Cook, Schweich Lectures, 1926, p. 144. The Abyssinian 'fire-cord' is called matab, corresponding to the zennūr of the Brahman priest.

² San = 'people of' in the Sudan and Sahara.

³ Kabail Ith or Ait = 'tribe of,' people of.

⁴ Mirabilem sui visum stupente populo Romano præbuerunt (Vopiscus). Vita Probi, xvii = Karanog, p. 102, § L.

It is significant that the names Automoloi, Galaules, and Autololoi reappear, used of North Sahara tribes by Latin writers of the fifth century, such as Paul Orosius (A.D. 417), and that these names are again very similar to present-day Tuareg caste names.

Autololoi = (Ait)-ilillan = Tuareg nobles. Automoloi = (Ait)-imillan = 'Tuareg nobles.'

Galaules = Kel Ulli (sing. Gulli) = an Azgar Tuareg variant of the more usual term Im aghad = ' servile tribes.'

The date of Paul Orosius is, it may be added, about intermediate between the break up of the Meroitic Kingdom of the Blemyes and Makkora, and the appearance in North Africa of tribes named Makkoritæ who became powerful enough for the Emperor Justin II to consent to receive an embassy from them at Constantinople in A.D. 537, just as Constantine I, according to Eusebius, had received a Blemy embassy at Constantinople about A.D. 326.

It may be objected that there is not much evidence of the passage of these Blemy tribes from the Eastern Sudan to North Africa in the period A.D. 300-500. But as Gsell and Gautier have shown that the coming of camels to North Africa practically synchronized with the era of the transfer of the capital of the Roman Empire from Rome to Constantinople, and as the Tuareg and camels must have spread west more or less simultaneously, it would seem probable that this lack of evidence is largely due to Arab indifference to distinctions between Berber-speaking tribes, who, after the Arab conquest, nearly all claimed an 'Arab' pedigree for reason of State, with or without justification.

A good deal of the patristic literature examined by Quatremère in volume I of his 'Mémoires sur 'l'Egypt,' seems to suggest that the 'Lewata' Berbers who invaded the Delta of Egypt again and again subsequent to the Arab conquest, were in many cases tribes who had worked their way north from the Sudan through the Western Oases such as Dakhla and Kharga.

These tribes were probably all called 'Lewata' because they camped in the regions called vaguely 'Lubia' (Libya), not because they were necessarily descended from the Libyans of the classical era.

The Christianity of North Africa and the continuance of the various Egyptian cults in Egypt during the Byzantine period, have, perhaps, tended to obscure evidence, which is considerable, that Mithraism was up to at least A.D. 1200, and even later, a powerful influence in the Sahara and Central Sudan, among both the Tuareg, and races culturally connected with them, such as the Maghumi of Bornu and the Jukon of the Bornu and Gongila region.

Thus, in Bornu official grants of privilege, called *Mahram*, which purport to go back to a.d. 1100–1200, there are obvious allusions to the seven spheres of Mithraism, and up to about A.D. 1500, the adherents of a cult who wore 'skins,' and conducted their worship in caves excavated in the earth, were numerous in Kanem, while even to-day there remain in Bornu one or two of these communities known to the Muslims as Nåthirîn (star-gazers). They were very probably the Kananyyin (Tuareg) of the time of Mai Idris Alooma (1570–1603), who are said to have been exterminated by that monarch.

The Tuareg apparently do not know exactly the derivation of the word ti'medr. On the other hand, they connect it in thought with the Tamashek words imederen, imederaran (or imedideran for euphony), and tamdrechi.

The first of these means 'wild (earth) donkeys,' the second 'wild (earth) men,' while the third means the relationship subsisting between a man and the son of his younger sister, the corresponding term for the son of the elder sister being tamakarchi.⁵ Apparently all these words suggest to a Tuareg 'Amadol,' the Earth, which in Hausa is personified in the expletive or oath Madala, i.e., the name of the fire-god whom the Kanuri called Midila, and who is probably the Aksumite god Medr.

The apparent explanation of these words and their meaning seems to be that in primitive Tamashek or its parent language *Mat* meant both 'earth' and 'tribesman' or 'kin' (in Tamashek Tam(a)tut = woman is the feminine of Mat), and that thus Mat-ala or Mat-ara, like Beth-el came later to mean 'Earth Lord,' as in Madulis (Mandalis) and Medr or as in Dthu Shara 'Ara (Dusares) of Petra, 'Lord, master of the hill.' In Kanem also Matala is used as an eponym of an early king in the king lists.

The following lines from songs of the Bulala kings of Kanem, cousins of the Maghumi, who, with

From makr = great; the uterine relationship itself is conveyed by 'mdr' in tamdrechi.

⁶ In Hausa Madara = milk.

⁷ See Cook, Schweich Lectures, 1926, p. 178.

Curle.

Arab help, drove the latter from Kanem in the fourteenth century, seem to put the Tuareg origin of the Maghumi of Kanem beyond doubt.

Bula Ferum, Ye Kiyi-ilalla. Am Jehad, Ye Kiyi-ilalla.

O town of Ferum, O noble Kiyi (Bulala).⁸
O town of Am Jehad, O noble Kiyi (Bulala).

Ni dugu kime.-You are the red9 grandson of a chief.

Fune chilimwa-with the black mouth-veil.

Karan kau-and armlets of black stone (chilimuca).

It may be added that these indications of origin are not relevant in respect of the modern Tuareg (the Tuareg of the Northern and Central Sahara) only. The kingdom of Kanem, which came into being about 700–800 A.D. in the region now called Borku, was originally a purely Tuareg polity, in which the name of the old governing class Maghumi is a mere variant of the similar Tamashek term, Imagaran or Imajaran = 'nobles.' These early migrant Maghumi of Kanem were sometimes even called by the name which the modern Kanuri apply to the Tuareg—Kinin or Kindin—as, for instance, in the expression 'Kindin Kel Buram' used of Maghumi invaders of Bornu.

In this expression Kindin is merely descriptive. Kel is a Tamashek word for 'clan' corresponding to Kabyle Ait or Ith—and Buram may, I think, be the same (R for L) as Balau or Balam, Balhemu, or Blemmyes—but it would be interesting, as Mr. Rodd observes, if further light on these questions were forthcoming.

H. R. PALMER.

Kenya: Archæology.

Prehistoric Graves in the Northern Frontier Province of Kenya Colony. By A. T. Curle.

In 1927 I assisted Mr. Pease, who was District Commissioner of the Gurreh District in the Northern Frontier Province of Kenya, to excavate one of the large burial cairns of stones which

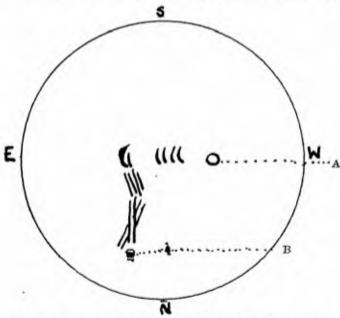


Fig. 1. Cairn near mandera, kenya colony: sketch plan (not to scale), showing position of the human bones: (a) metal earring: (b) fragment of bone.

are so common all over the North East corner of Africa from the River Tana in the South to French Somaliland in the North. We also investigated other forms of burial in the area.

The cairn selected was situated about two miles South of Mandera, and three miles from the River Dawa which forms the boundary between Kenya and Abyssinia at that part. It was at the base of a low rocky hill, on slightly rising ground and on a hard gravelly soil. The cairn measured 36 feet in diameter, and the top which was flattish was 6 feet above the ground level on the lower side, and 41 feet on the higher side. There were four depressions round the centre as if parts had subsided. After the removal of the outer surface at a depth of about a foot the interstices between the stones were filled with hard soil, possibly deposited by termites, while the lower part of the cairn was a solid mass of hard earth and stones (Fig. 1). A section of

8 Bulala = Abu or Bu-ilalla.

about the origin of the present-day Tuareg of the Sahara—the Maghumi and Bulala (Bu-Ilalla) Tuareg of Bornu must have come to Borku from regions further East. All their traditions bring them from the Red Sea.

⁹ Both in Kanuri and Hausa the word for 'red' is used of skin colour where we should use 'white'; a Tuareg is 'kime,' 'red,' but a much darker Sudanese is called 'bul' (white). Whatever views may be held

this mass from the southern edge to the centre was systematically cleared. Nearing the ground level a blackish mixture was found in the soil, containing decayed vegetable matter, while immediately below this there were distinct traces of lime, and it was observed that a number of stones proved

quite soft as if they had been subjected to fire. Towards the centre of the cairn the stones were noticeably larger and a number were set on edge, but owing to the subsidence of the cairn and the mass of hard earth no definite formation could be traced. At ground level, 15 feet from the southern edge and 3 feet from the centre, fragments of an earthenware vessel were found, which had obviously been fractured by the collapse of the cairn. The fragments were pieced together and formed a bowl of coarse red earthenware 8 inches in diameter and standing on four short legs which rested on a round base, the whole being 6 inches in height. Within the bowl were marks either of fire or of decomposed matter, forming a black coating. The bowl was clearly a stand for food, see Note 1, and the shape and design interesting and



Fig. 2. Earthenware bowl found in large cairn (fig. 1).

unlike anything in use in the district to-day; moreover its fragility would render it unsuited to the requirements of a nomadic race. See Note 2.

About 6 inches nearer the centre, the first traces of human bones were found, only fragments remained that crumbled away when touched, but by brushing the earth their outlines could be traced. The lower leg bones lay north and south and were crossed, the right being uppermost, and the thigh bones were roughly in the centre of the cairn, the ribs and the head lay at right angles to the legs, the head lying to the west. A copper or bronze penannular ring measuring 2½ inches in diameter and of the simplest character, which from its position was presumably an ear ring, was found touching the skull. The position of the arms was not traced.

It would seem from the position of the bones that the body had been placed on the ground level in a sitting position and the cairn built around it with a chamber at the feet and each side, roofed over with wood. The collapse of these three chambers and the 'body chamber' would account for the depressions which are a noticeable feature of all the cairns of large type in the Northern Frontier Province of Kenya, and in Somaliland. Whether

bowls were placed in the chambers at the sides can only be ascertained by further research.

Later on in 1927 I excavated a very large cairn of the same type measuring 62 feet in diameter, close to Wajir, also in the Northern Frontier Province of Kenya, but owing to the ravages of termites and rats, no relics were recovered except the fragments of a bowl exactly similar to that found in the previous excavation.

The traditions of the Gurreh, a nomadic tribe of Galla extraction at present living in the Dawa Valley, ascribe these cairns to a Hamitic race known by them as 'The Five

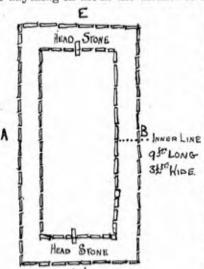


FIG. 3. GRAVE FROM A CEMETERY IN KENYA COLONY: SKETCH PLAN.

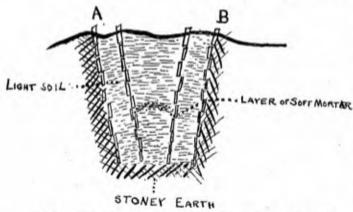


Fig. 4. VERTICAL SECTION OF GRAVE ON LINE A-B IN FIG. 3.

'Tribes,' who eventually drove out the 'Ben Israeli' mentioned later. Somali tradition in Kenya ascribes them to the 'Madanleh,' who they maintain were super-men of great stature, who dug the wells which are still in use to-day at Wajir, and whose descendants were driven out to the Lake Rudolph area by the Galla.

The other form of burial which was investigated consisted of graves in cemeteries, arranged in rows, the graves usually lying east and west, with headstones. A grave at the end of the row was selected for examination. It was marked off by two lines of stones (Fig. 3), and when a section was cut across (Fig. 4), it was found that both lines of stones were continued below the ground level to a depth of 5 feet, converging inwards as they got lower. At three feet down a layer of mortar composed of lime and sand was discovered, but no remains were found under it. It was noticeable that although the earth outside was stony, inside the stones there was nothing but soft sandy soil.

This form of grave is found within the same geographical limits as the cairns described above and I believe it to be of Muhammadan culture, for the reason that around the mosque at Au Bakadleh in the Hargeisa District of British Somaliland, there are many graves of this type, exact replicas of those on the Dawa some five hundred miles distant. The Gurreh attribute these graves to the 'Ben 'Israeli,' a people of superior culture, and a Semitic race, see Note 3, while the Somalis at Au Bakadleh say that this type of grave was that of the earliest people of Arabian descent who crossed to Africa to preach the gospel of Muhammad, and that they were buried with their face looking towards Mecca and lying on their right side.

The other principal form of burial which one finds all over the Somali country is the small cairn, universally ascribed to the Galla or Wardeh, where the dead are placed in a sitting position in a small hole covered with wood or branches with a heap of stones on the top. These are of comparatively recent date and correspond in varying antiquity according to the gradual penetration of the Somalis from the north to the south.

Thus, according to native tradition, which must be regarded as a very unreliable source of information, the cemetery graves of the 'Ben Israeli' would be the earliest, followed by the cairns of 'The Five Tribes' or the 'Madanleh,' with the small cairns of the Galla or Wardeh as the most recent.

Unfortunately, it was impossible to preserve the finds made in the excavations, and although the record was preserved in the files of Mandera District Office, I feel that in view of the steadily increasing interest in antiquities, it should be published to make it accessible to a wider circle. I know that several other people have dug into cairns in the Northern Frontier Province of Kenya, and I trust that one day they, too, will place their results on record.

NOTES.

 I have seen at Guimbo in Italian Somaliland a Muhammadan tomb with a hole in the masonry at one end into which offerings of food and incense were placed at regular intervals, but no special type of dish was utilized.

I have looked in many museums at home and abroad to see if I could trace any vessel of similar

type and only saw one in a museum at Bologna which was found in an Etruscan burial site.

There is a tribe of Indian Jews to-day living on the coast near Bombay called the 'Beni Israel', who are reputed to have originally migrated from Arabia. They supplied whole regiments for the East India Company's Army prior to the system of mixing the religions in each regiment. They do A. T. CURLE. not indulge in trade and commerce to the same extent as their fellow Jews.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Glimpses of Life under Tibetan Rule in Chinese Turkestan (8th century, A.D.). Communication presented by Professor F. W. Thomas, C.I.E., Ph.D., 25 April, 1933.

Chinese Turkestan is the region described by the Greek geographers under the title 'Scythia beyond the Imaos (mountains).' Mountains, rivers, cities and peoples are mentioned by the geographers with longitudes and latitudes rather definite according to the system followed. But practically none of them are identifiable by their names, and this, despite the fact that the information is proved to have been based upon the reports of travelling merchants. The verification of the routes and the construction of a definite map of the country in early times has required a hundred years of extremely learned and ingenious philological research, combined with the investigations of famous travellers and archæologists. Mainly by recourse to the writings of the Chinese, who from about the beginning of the Christian era had an exact knowledge of the country, the topography, and also the chief historical vicissitudes of the numerous states, have been to a great extent disentangled.

Most of the states antedate the Chinese domination, and their origin, and possible trade connections with Persia and the Greek kingdom of Bactria are problematic, as is also the ethnography. The most famous of the states, Khotan, was founded about 240 B.c. by emigrants from north-western India and from the Sino-Tibetan border. The earliest writing and developed religion came from India. During about 1,000 years the religious civilization was Indian and Buddhist, with an admixture of Manichaism during the later centuries; also, perhaps, from about the middle of the seventh century A.D., of the Christianity which reached China. The splendid volumes containing the results of modern archæological exploration in the country furnish ocular evidence of the multitude of great structural and excavated shrines of a magnificent and refined religious art; they are also instructive in regard to material products in general and to the usages connected therewith. They cannot, however, reveal much of the sentiments and character of the native peoples: nor do the eminently political Chinese shed much light upon this subject, although their annals and the records of Buddhist pilgrims record most valuable and precise observations. The Kharosthi documents (in an Indian dialect) from Shanshan afford an intimate view of administration and of social conditions during the second and third centuries A.D. For the seventh-eight century we have abundant (but fragmentary) documents, procured by Sir A. Stein from ruined forts built by the Tibetans, who dominated most of the country from about 675 A.D. Besides the information furnished by these documents in regard to Tibetan military and administrative arrangements, they shed light upon economic, legal and social conditions and upon the civilized manners and sentiments of the people. Some literary works in Tibetan afford an insight also into the state of the Buddhist religion in Khotan, Shan-shan and Tibet.

OBITUARY.

Francis La Flesche: died 5 September, 1932.

The American Anthropologist announces the death of Dr. Francis La Flesche, ethnologist, at the age of seventy-five. Dr. La Flesche, who was the son of a former head-



chief of the Omaha tribe but of partly French descent, had been connected for thirty years with the Bureau of Indian Affairs and for twenty-two years with the Smithsonian Institution. In the service of this last he devoted himself to recording in the exactest detail, with the help of native experts whose confidence he enjoyed, the ritual poetry of his own and other tribes.

Dr. La Flesche acknowledged a great debt to the pioneer investigator of the Omaha tribe, Miss Alice C. Fletcher, who roused his early ambition to record his people's history and poetry, and made him first her assistant and later her collaborator in the study of Indian religion. Looking upon him as an adopted son, she gave him the intimacy of a home, perhaps the prime need of a man who has had to take the step from one civilization to another. In ethnological work, the pooling of their special gifts and opportunities proved exceedingly fruitful. They appeared in 1910 as joint authors of a book which has become a classic, "The Omaha Tribe" (27th Ann. Rep. Bur. Amer. Eth.); and their collaboration continued until Miss Fletcher's death.

Among Dr. La Flesche's latest published works were "The Osage Tribe, Rites of the Chiefs" (B.A.E. Ann. Rep. 1914) and "The Osage Tribe, Rite of Vigil" (B.A.E. Ann. Rep. 1917).

B. AITKEN.

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494. Washington, 1927.)

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A Dictionary of the Omaha Language.

A Study of Discoidal Pipes.

The Wa-shá-be A-thin or War Ceremony of the Osage Tribe.

The Wá-wa-thon: Peace Ceremony of the Osage Tribe.

REVIEWS.

ASIA.

Arabia Felix. By Bertram Thomas, O.B.E. With an introduction by T. E. Lawrence and appendix by Sir Arthur Keith. London, 1932. 8vo. Pp. xxxii + 398, with illustrations, maps, etc. Price 25s.

Here is a fascinating record of a memorable exploration. If the Rub' al Khali had been as uninhabited as was rumoured, it would have been a great feat to cross it; to have brought back so full an account of its queer fauna and occasional plants—with a score or more of new species—and the book is full of ethnographical details of many sorts—adds to its scientific interest. It was to be expected that Mr. Thomas would become as intimate with his own escort as a traveller must; what was not so likely was that he would encounter enough people, even along the margin of the sands, to make a substantial contribution to anthropology; still less that he would so far win their confidence as to obtain quite a number of physical measurements.

Of these, Sir Arthur Keith, with the help of Dr. Wilton M. Krogman, contributes a detailed study; and Mr. Thomas has sent a further account for publication in the Institute's Journal to supplement what is printed in J.R.A.I., 1930. Burton and Maitland had already noted the contrast of physical types between the Arabs

of the north and those of the south-east and east, and the resemblance of the latter to the Abyssinians and Egypto-African peoples generally. As Maitland put it:
"The stately Semite of the north is Arab by adoption " and by residence rather than by descent." A fresh point was Dr. Seligman's observation (J.R.A.I., xlvii, 1917, 214) that the southern Arabs in Oman were roundheaded, in marked contrast both to the northern and to the people west of the Red Sea; and this, too, is confirmed here, all the more emphatically by contrast with Henry Field's recent measurements of Bedouin near Kish on the same chart (pp. 307, 326). Other physical peculiarities link these South Arabian breeds with the Armenoids and with another outlier breed in Madras (p. 310). But a pre-Islamic skull from Hasik in the central south differs in people, and resembles at first sight the rather round-headed types of the Aryean, with cephalic index about 80. Is it perhaps a far-wandered Greek or Levantine? Complexion, hair, features, and bodily proportions, however, link the southern Arab with 'Semitic Caucasian'; and the characteristic Armenoid nose and lower lip reappear both here and in the Madrasee type above mentioned (p. 310, fig. 5).

south is not easy to guess. Its physical peculiarities suggest that if it is connected originally with Armenoid brachycephaly at all, the connection is ancient, and there has been a good deal of subsequent adjustment on one side or the other; most likely in the northern group, where geographically progressive variations occur. It may, however, be suggested that in view of the coherence of its distribution in the Mountain Zone and its immediate neighbourhood with that of forested, or formerly forested upland, and of its repeated extension along the high edge of the Arabian crust-block, through Syria and Palestine into Egypt, similarly favourable conditions even further south would provide Armenoid folk with opportunity to spread further along the same high edge of Western Arabia in such fashion as to be entrapped in a cul-de-sac when conditions became again austerer. favourable conditions round the highland margin of the Persian plateau would permit the distribution of the "brachycephalic people of the Pamir-Levant tract" (p. 311), by which is meant the actual Armenoid habitat.

In the course of their commentary on these racial types, Sir Arthur Keith and Dr. Krogman opportunely insist on the scientific as well as the practical value of racial identifications "reached by travellers dependent "merely on their senses and judgment." Certainly, if we may 'try it on the dog,' it is not by cephalic indices, nor even by hair and eye colour, that people identify a lurcher or an Alderney. The Sultan of Muscat thought his people were closer akin to the men of North-east Africa than to those of Northern Arabia (pp. 318-9); Captain Thomas is inclined to agree with him; and the photographs published here support them both. But there are other elements, in particular what is aptly described as the 'ram-faced countenance' (p. 319) familiar from Persia to the Western Himalayas, and akin in its components—head form, nose, and lips—to Armenoid types, though rather differently put together.

From these suggestive generalities, we are led on into a seductive theory (pp. 320-21) which we must hope that the authors will some day develop more fully. It depends, like the suggestion, above mentioned, about South Arabian brachycephaly, on a period of less arid climate in 'late pleistocene' times, and on a 'break-'through' of 'Caucasian' invaders from north of the mountain zone. But the authors do not say very precisely what they mean by 'Caucasian,' and elsewhere they speak ("to be more precise," p. 319) of 'Semitic Caucasian,' which is more puzzling still. Would it not be helpful if 'Caucasian' were reserved to denote types which have been observed in or near the Caucasus, or alternatively restricted to skulls which resemble Blumenbach's original type-specimen, which apparently did come from those parts.

Meanwhile, the Sultan's experience seems to hold the field; and we may provisionally believe that the South Arabs essentially "represent a residue of Hamitic population which at one time occupied the whole of "Arabia."

J. L. M.

Megalithic Remains in South Sumatra. By Dr.

106

A. N. J. Th.À Th. van der Hoop, translated by William Shirlaw (W. J. Thieme & Cie., Zutphen, Netherland, n.d.). zii + 191 pp., illustrations and mans.

This volume is a translation of a report by Dr. van der Hoop on a number of stone monuments, many hitherto unknown, classified under the following groups: (1) images, 53; (2) "Lescengbatce," 20 (these are stones, sometimes very massive, into which holes some 15 cm. in diameter and about the same depth have been worked); (3) troughs, 12; (4) upright stones, at least 8 groups; (5) rectangular arrangements of four

stones, 8; (6) stone avenues, 2; (7) dolmens, at least 20; (8) cists, 9; (9) terrace graves, 2; (10) pitted stones, generally in relation with a menhir; (11) various unclassified.

It is probable that divers groups in this miscellaneous collection may differ considerably in age, a matter scarcely discussed; it would indeed be premature to go far in this direction, for not only is very little known but, as the author emphasizes, it is only for the better understanding of his South Sumatran megaliths that he considers collateral evidence from elsewhere. It must, however, be emphasized at once that the great value of this diffusely written book does not lie in its text but in the fine series of plates which illustrate the various stone remains so far known in southern Sumatra.

The stone images are by far the most remarkable of these relics, and on account of considerations of space as well as their predominant interest they alone are dealt with in this review; indeed, the author, who everywhere insists on the preliminary nature of his publication, devotes most of his space and energy to them. The images representing human figures are perhaps the most interesting. These occur singly or in groups of two, and in a single instance constitute a larger group. Sometimes a buffalo or an elephant is brought into the group. The age of these images is discussed at length in Chapter VI, and much stress is laid on the representation on one of the images at Batoegadjah of a bronze drum of well-known type generally regarded as of southern Chinese origin. Some of these drums certainly belong to the Han period, and the author quotes at length Goloubew's excavations at Dong-Son in Indo-China, where such drums have been found in graves of undoubted late Han date. It would seem then that Dr. van der Hoop is inclined to attribute the figures to a period not much more recent than this. They certainly appear to be pre-Hindu, while their purpose may have been funerary. C. G. S.

107 in Eshnuna, 1930-31. By H. Frankfort,
T. Jacobsen and C. Preusser. Oriental Institute of
the University of Chicago. Communication No. 13.
94" × 7". 112 pp.

A well-written and well-produced preliminary report on the first season's work of an expedition from the Oriental Institute of Chicago to Iraq. How the places named were chosen for the scene of its work is explained; the principal mound, Tell Asmar, had already been identified as the site of an ancient and important town named Eshnunna (also called Ashnunnak and Tupliash), while from Khafaje, the ancient name of which is still unknown, interesting antiquities had been obtained by illicit digging, which it was advisable to stop by a regular exploration. Both sites proved singularly true to the preliminary indications, for whereas Tell Asmar, up to the present, has yielded much historical information by the medium of inscriptions, and few objects, Khafaje has reversed the process, and given up a number of remarkable works of art, but virtually no information. Hence the first three chapters, devoted to Tell Asmar, are a good deal more concerned with history and religion than with archeology. Only one building was partially excavated: this seemed to be a palace, and had been greatly re-modelled in its occupation and repair by successive kings, some twenty in all, whose names and, to some extent, order of succession have been established. The most flourishing period of the place fell in the very confused interval between the fall of Ur and the establishment of Hammurabi's empire, when the local kings were evidently factors of some importance in the struggles between the cities of Babylonia and their external enemies or allies, the Amorites and Elamites. The historical situation is acutely discussed by Dr. Frankfort, and the inscriptions by Dr. Jacobsen, who contributes an interesting suggestion on the name

of Tishpak, the principal local god.

Chapter IV contains the account of Khafaje, by its excavator, Dr. Preusser. Here, as already mentioned, there was little historical information to be gained, but a bare three months of work revealed a most interesting system of fortification, consisting of a double circuitwall built entirely of plano-convex bricks which are peculiar to a special period of the Sumerian civilization, the centuries immediately before and after 3000 B.C. Within, or partly under, the inner wall some buildings were explored which yielded very notable antiquities of the period indicated; a most interesting series of portrait-heads, three copper figures of men on elaborate stands, some stone mace-heads, and an archaic plaque carved in relief with scenes of royal ceremonial. By an extraordinary coincidence, the only corner of this which is missing can be restored completely from a fragment found at Ur, and thus the whole composition is recovered. C. J. GADD.

The Storm-swept Roof of Asia. By Emil Trinkler. English Translation by B. K. Featherstone. London, 1931. Pp. 312. With illustrations and Map. Price 21s. net.

These travels in Kashmir, Tibet and Chinese Turkestan are brightly described, and illustrated by good photographs. The main objects of Dr. Trinkler's expedition were geological and geographical (e.g., Geogr. Journ., lxxxv, 225-232); he confirms Sir Aurel Stein's record of desiccation since Neolithic times, but reserves judgment as to its cause.

J. L. M.

BIBLIOGRAPHY.

Volkskundliche Bibliographie für die Jahre 1925 und 1926. Im Auftrage des Verbandes Deutscher Ver. f. Volkskunde mit Unterstützung von E. 109 Hoffmann-Krayer. Hrsg. von Paul Geiger. Pp. xxxii. 593. Berlin and Leipzig (Walter de Gruyter & Co.), 1931.

This volume of the 'Volkskundliche Bibliographie' which covers the two years, 1925 and 1926, is much superior to the parts which preceded it. Indeed, it promises to become a most important contribution to the literature of folk-lore when the editors have succeeded in obtaining the co-operation from several European countries not yet satisfactorily represented and also

from America.

The work is arranged under convenient sections which are themselves subdivided so as to facilitate reference. Moreover, the full subject and author indices are of great value, and the short notes which accompany many of the entries are of considerable service in cases where the title conveys little information as to the precise nature of the contents of the book or article. To the general reader as well as to the anthropologist the book will be found to be of use; to the folk-lorist it will, of course, be indispensable.

E. J. DINGWALL.

Bibliotheca Celtica. A Register of Publications relating to Wales and the Celtic Peoples and Languages for the years 1924-26. Pp. vi, 308. National Library of Wales, 1932.

This volume, which is the eighth in the series, is a useful addition to our catalogues of publications relating to Wales. But it could have been made much more useful. The compilers have taken great pains to include all publications which can be said to have even a remote

relation to Wales. To quote two examples: it is strange to see Liddell and Scott's 'Greek-English Lexicon' appear in a register of publications relating to Wales, simply because, I suppose, the new edition is being revised by a Yorkshireman who happens to be principal of one of the Welsh Colleges. It is stranger still to see listed a large number of Dr. R. Vaughan Williams's compositions, for, as far as I am aware, there is no real case for including this distinguished Englishman amongst the Welsh musicians, or for admitting him into the larger circle of 'Celtie peoples.' I fear that the compilers, in cases such as this, have spent too long a time over genealogies to find links with Wales for the authors listed. And if the intention is to include publications which have no relation to Wales or the Keltic peoples, but which are the work of foreign scholars residing at the moment in Wales (e.g., Professor Livens's 'Theory of Electricity,' or W. N. Stable's 'Bankruptcy Act' or the 'Greck-English Lexicon'), then the title of this volume should be changed. As it stands, it is certainly not a 'Bibliotheca Celtica,' especially since in some instances works have been included bearing no relation to Wales, the Keltie peoples or languages, by scholars without even the residential qualification. case in point is that of H. Idris Bell's 'Jews and Christians in Egypt.' I doubt, too, the wisdom of including programmes of national and local eisteddfodau; their publication in a separate pamphlet would serve a

better purpose.

To list a pamphlet entitled 'From the Pit to Your Cellar' under 'From' is particularly irritating, since one does not generally search for titles under prepositions. There are also some important omissions in the cross-references, and Welsh archæology has been most shabbily treated. The compilers, too, have tried most annoyingly to improve upon the Norwegian language by listing Professor Alf Sommerfelt's publications under

Alf[red] 'Sommerfelt!

The only name attached to this volume, which is obviously the fruit of much labour and research in the Department of Printed Books of the National Library of Wales, is that of the Chief Librarian. This policy of printing all publications-most of them obviously the work of specialists in the different branches of library work-under the name of the Chief Librarian only, was followed persistently during the directorship of the first Librarian of the National Library. It is a policy to be deplored. All national institutions of this nature are staffed by specialists and scholars, and it is just and proper that their work should be acknowledged by publishing the books which they prepare under their names. A prefatory note by the head of the institution is, of course, to be expected, but the Introduction should be from the pen of the author himself, and it is his name which should appear on the cover and title-page. Indeed, all possible acknowledgments should be made in these publications. It is degrading to any depart-mental specialist, and very unjust to scholars who labour so consistently in the national service, that their work should pass unacknowledged and that they should be treated as mere clerks. It is to the credit of the British Museum and of some other institutions of a similar character that they have recognized this principle, and I trust that the present Librarian of the National Library of Wales will adopt the same principle.

These blemishes detract seriously from the value of the work which, however, even in its imperfection, ought to prove of much use to the student. But it is to be hoped that in the preparation of the next volumes the compilers will delimit their field of research and make those volumes what this one pretends to be—a real 'Bibliotheca Celtica.' IORWERTH C. PEATE.

CORRESPONDENCE.

Tibet: Natural Stone Object with Phallic Suggestions

In the Tibetan worship survivals of Phallicism are, as a rule, not apparent to the ordinary traveller. But occasionally stones and features on the landscape with a real or fancied resemblance to the generative organs become talismans or definite objects of worship. The enclosed photograph by Mr. Gordon T. Bowles furnishes a striking illustration of Tibetan litholatry. The object in



question functions at O Lung Shī, a settlement on the Batang road, 65 miles west of Tatsienlu. It usually reposes on a rude shrine outside a small Chinese temple. The shrine shows clear ovidence that the 'Phallus' receives a fair share of the local worship. The natives, however, were disinclined to discuss it, but gave the impression that it was the guardian of the valley and rather uncertain in its behaviour. Whether was a suspicion there abroad that we might steal the 'god,' or anger it by our curiosity, is difficult to say, but in a short time it had been removed, and repeated attempts failed to elicit any further information. The

phallic content is accidental; the stone belongs to a class of grotesque natural objects, where arresting forms suggest unusual activities of powerful, but unclassified agents.

Tatsienlu. J. HUSTON EDGAR.

Nomenclature of Copper (See J.R.A.I., lxii, 1932).

SIR,-Since I welcome heartily the attempt of Mr. T. A. Rickard to give some definite meaning to the words 'bronze,' 'brass,' 'copper,' as used, or misused, in archæology, I write to add a few notes on minor points where he has fallen into slight inaccuracies. My references are to the pages of his article.

P. 285, second paragraph. His reference to pseudo-Aristotle, de mirab. ausc., is correct, though it might perhaps have been added that section 62 is sometimes numbered 63. But I do not see on what grounds he concludes that "brass, the zinc-copper alloy, was made "fortuitously so early as 350 B.c.", for the treatise is much later than Aristotle himself and its exact date is not known. The real Aristotle is cited by the scholiast on Apollonios of Rhodes, see below.

Hesychios is not worth quoting here, for he does no more than give an abbreviated and corrupt form of the scholiast. The reference to Photics I cannot find; perhaps Mr. Rickard will give it more exactly.

Apollonios does no more than mention oreichalkos, in a phrase borrowed from a much older author, the writer, whoever he was, of the poem called the Shield of Herakles, 122, ὀρειχάλκοιο φαεινοῦ. This poem was written perhaps about the end of the seventh century B.C., certainly not later than the first half of the sixth, and it contains the first mention we have of this mysterious metal. Unfortunately, beyond saying

that it is 'bright' or 'shining,' it tells us no more about it.

about it.

More information is given by the scholiast on Apollonios, Argonautika, iv, 973. This well-informed author, who may be of the first century A.D., or thereabouts, tells us that "they say it is a sort of 'bronze' "(χαλκὸ), named after its inventor, one Oreios. "But Aristotle in his Teletai" (corrupt, perhaps a mistake for *Politeiai*) " says that there is no such name " (as Oreios), " and no such kind" (of metal as orei-(as Oreios), "and no such kind" (of metal as orei-chalkos). "People commonly suppose that it is a mere " name, with no reality corresponding, but this is an " unfounded popular opinion, for experts say there is " such a metal.

P. 286. For "Sextus Pompeius Flaccus" read "Sextus Pompeius Festus." He wrote in the fourth century A.D., not the first, but his surviving work is an epitome of Verrius Flaccus, who was a contemporary of the Emperor Augustus. The reference is therefore

the Emperor Augustus. The reference is therefore Festus, de uerborum significatu, p. 41, 15 Lindsay.

P. 287. It might be worth adding that bronzino could by no possibility be derived from brunum (this has been miswritten or misprinted brunus) acs, for -ino is an adjectival suffix, not the second half of a compound H. J. ROSE.

An Irish Food-Vessel of the Megalithic Period (Cf. Man, 1932, 299.)

SIR,-Mr. Gogan, of the National Museum, Dublin, has published1 an Irish Bronze Age foodvessel, said to have come from Katesbridge, County Down. In claiming certain unique features for this pot, he points out that morphologically there is no exact parallel amongst Abercromby's famous series,2 and further that the well-known 'eye' motif, common to the ceramic of certain phases of the Megalithic period in the Iberian Peninsula, Brittany and Scandinavia, is present on the upper portion of the vessel. Doubting the pure ancestry of the British food-vessel in the Neolithic bowl, Mr. Gogan would therefore invoke influence from the later passage grave period in Denmark and the 'Megalithic' period in Iberia.

Recent researches among the beaker and food-vessel ceramic of Scotland indicate that these two pottery types were approximately contemporary in North Britain, and further that the typologically early forms of food-vessel are found in Ireland. While still adhering to the traditional view that the food-vessel was evolved from a hypothetical Irish Neolithic bowl, it is evident there are other currents underlying the British foodvessel complex, some of which may explain the alleged

eye' motif on the Katesbridge pot. Some early Scottish and Irish food-vessels (Abercromby's Type A) often exhibit a radial decoration on the base which finds an almost exact parallel on the wide-mouthed bowls from the rock-cut tombs of Palmella in Portugal.³ There also frequently occurs on early British food-vessels the so-called false relief decoration-essentially an imitation of a wood-worker's technique. Precisely similar ornament occurs on bell-beakers from the Pyrenees. These parallelisms are strengthened by the occurrence in Ireland and Portugal of hollow-based flint arrow-heads, and recently by Professor Gordon Childe's derivation of the British and Irish cup and ring markings from the stylized rock engravings of Galicia.4 In the same connection, it is

Man, November, 1932. No. 299.

Abercromby. 'Bronze Age Pottery.' Vol. I. Castillo. 'Del Vaso Campaniforme.' Pl. XLI.

⁴ V. Gordon Childe. 'The Bronze Age.' Pp. 150 and 166.

interesting to record the association suggested by Castillo between the ornament on the beaker fragments from Moytura and that on certain Portuguese bell-

At a slightly later stage the true concomitants of the British Early Bronze Age food-vessel complex have undoubted Iberian parallelisms: for example, the flat celt in copper or bronze—the halbert and the flat round-heeled knife dagger, not to mention a curious geometric artistic sense, displayed on the flat metal celts in particular, which can be paralleled on the slate plaques from the rock-cut tombs of Palmella in Portugal.

Contemporary with the megalithic sepulchres of Los Millares in Almeria is a type of idol made from the phalange of an animal and decorated with painted symbols which include the famous 'cye' motif. The ornamental scheme on one such idol from Almazaraque is closely similar to designs on the stones at New Grange in Ireland. If the Almerian phalange idol is invoked as the inspirational source of the 'eye' motif on the Katesbridge pot, then it would appear that the foodvessel in Ireland is contemporary with the chambered tomb of the type of New Grange or Carrowkeel. Such synchronism would help the derivation of the chambered tomb from an Almerian prototype, while stray phalange idols in the rock-cut tombs of Palmella demonstrate how the radial basic decoration may have reached Ireland about the same time. This hypothesis, however, leads to the startling paradox that the food-vessel is the

typical ceramic of the Irish chambered tomb.

In Scandinavia the 'eye' motif occurs on an angular pot from the passage grave of Gundestrup. It is interesting to note that the scheme of ornament is almost exactly paralleled by the decoration on a fragment from a sepulchre at Los Millares in Almeria. From another passage grave at Mogenstrup* comes another very interesting vessel ornamented by alternating groups of vertical and horizontal rows of impressed 'whipped cord' or 'maggot' pattern. The design and technique is exactly similar to that on a food-vessel from a short-cist near Doune in Perthshire. The same cist yielded a second food-vessel of similar shape and design, but which imitated the whipped cord impressions by plain Other instances of contact between the Scottish food-vessel complex and the passage-grave culture of Denmark are to be found in the axe-shaped beads of amber, an example of which occurs in Lanarkshire; while Mr. Craw would postulate a Scandinavian amber plate necklace as the prototype for the famous

Scottish examples in jet.¹¹
But if the Scottish food-vessels are in some way to be connected with Scandinavia through the maggetornamented pot of Mogenstrup, or perhaps with the even earlier whipped-cord ware of the Baltic, recently shown by Rosenberg to have analogies with the Neolithic Peterborough ware, 12 the current was not one affecting the initial stages of the food-vessel in North Britain. Its evolutionary centre is situated somewhere in the West or South-West, and it is to that quarter that Mr. Gogan should look for the prototype of the 'eye motif.

In conclusion, it is only fair to add that the Kates-

bridge food-vessel, on the analogy of a typological series of over three hundred Scottish examples, is late, while its ornament with the filled chevrons and, as Mr. Gogan has rightly pointed out, the predominant use of incision, indicates beaker tradition. The pot is a hybrid. In these circumstances, it behoves one to be sceptical of interpreting the ornament on the upper band as an 'eye' motif which, for reasons already adduced, ought to be present only on early examples of the foodvessels class in Britain.
M. E. CRICHTON MITCHELL.

The Theory of Speech and Language: review of a review. (Cf. Man, 1933, 72.)

It is a curious coincidence that the same periodical should have given hospitality to my first reflexions on linguistic theory (Man, 1919, 2) and should also have contained the least satisfactory review yet received of their final outcome (Man, 1933, 72).

An author is entitled to expect two things from his critics: firstly, that they should at least indicate the subject of the book, its method of going to work, and the aim it has in view; and, secondly, that when they voice objections, a fair representation should be given of the opinions to which they object. In both directions Dr. Blagden has fallen short. He has left it to me to inform the readers of Man what the book is about, and his adverse criticisms do not represent, but travesty, my views.

My book examines the nature and validity of currently employed grammatical categories. My interest in the topic dates from the time when I began to collect material for my 'Egyptian Grammar.' Discussion with colleagues revealed the fact that neither they nor I could give satisfactory accounts of the terms usual in The customary definitions were clearly our trade. fallacious, but nevertheless it was impossible to dispense with the accepted grammatical nomenclature. I drew the conclusion that grammarians had instinctively evolved the right methods of linguistic analysis, but that the theorists who attempted to explain and justify those methods were at sea. I found it no easy matter to explain this failure of linguistic theory, until it dawned upon me that the mistake of previous writers had been the omission ever to examine a single act of speech in its total environment, and thence to discover the factors involved and the mechanism employed. This has been the mode of treatment I have attempted. It carried with it the necessity of harping monotonously upon one and the same utterance, of affirming many things which are obvious and therefore frequently overlooked, and of extending the use of certain terms to include under a category exemplifications of it habitually classified elsewhere. I well understand that such a painstaking manner of going to work must seem tedious, but I am convinced that it is indispensable.

To turn now to Dr. Blagden's detailed criticisms. He complains of my love of paradox, but in his first example of it he has to conclude: " puts the matter right and justifies the paradox, " though hardly the use of it." How can a paradox be justified and the use of it not? In point of fact the

⁵ Castillo. P. 188.

V. Gordon Childe. 'Dawn of European Civilization.' Fig. 58 (1).

^{&#}x27;Nordiske Fortidsminder.' Vol. II, Nordman. Pt. II, Fig. XXIII.

⁸ V. Gordon Childe. ' Dawn of European Civilization.' Fig. I D.

Nordman. 'Nordiske Fortidsminder.' Vol. II, Pt. II, Fig. LXXII.

Abercromby. 'Bronze Age Pottery.' Vol. I., Pl. XLVI, Nos. 278-277.
 J. H. Craw. Proceedings of the Society of Antiquaries

of Scotland, 1928-29, p. 154.

12 G. Rosenberg. 'Kulturströmungen in Europa zur Steinzeit.' Pp. 156 and 159, No. 338.

matter is of great importance. Dr. Blagden cites my statement in so abbreviated a form as to make it almost unintelligible: "What passes in speech... is more "sound, bereft of all sense." The quotation comes from a passage where I explain that words are not really objects of sense, but psychical entities. This is a fundamental fact, and I take the opportunity of acknowledging that it had been previously stated by de Saussure, Cours de linguistique, p. 32. The sense of a spoken word-sound has to be put into it by the listener. If I hear a Chinaman speaking Chinese, to me the sounds he utters do not appear as words, since I am not acquainted with Chinese. Only if a Chinese word were already a psychical possession of mine, both sound and sense, would the utterance in which it occurred convey it to my brain. The point is particularly important as regards pronunciation. When I hear a Cockney saying Oi dunno I infer that what he means by Oi is the word which presents itself to my mind as I.

It is true that I use the distinction between speech and language as a master-key to open all doors, but it is not true that in so doing I strain that distinction. Let us listen to Dr. Blagden: "A casual reader, who " finds on p. 110 that 'speech is the sole generator of "language' and on p. 175 that 'language is the mother of all speech,' may be puzzled as to which came first, the owl or the egg." My knowledge of natural history is defective, but I find no difficulty in believing both that owls come from eggs and that they in turn produce other eggs. Dr. Blagden asserts that it is not clear what my fundamental principle that "the sentence is "the unit of speech and the word is the unit of language" really amounts to. As regards the 'sentence' amounts to more than a hundred pages of my book, which obviously cannot be repeated here. He continues: the second half of this statement cannot be taken to " imply that our mental store of language contains " words but no groups of words or sentences," and then quotes p. 46 of my book to condemn me out of my own mouth. But the very reason why I dealt with mechanized phrases in sentence-form at so early a stage was to warn the reader that my account of the general theory of linguistics does not and cannot be extended to them. They demand special treatment; phrases like 'Good morning' are analogous to compound words, and will have to be treated in connexion with these in my second volume. Dr. Blagden thinks that it is going rather far to treat But—/ with deliberate aposiopesis as a complete sentence. But if he admits that here the speaker's intention was merely to state that he felt an objection, and if he admits, as he doubtless would, that statements constitute one of the four classes of 'sentence,' it would seem to follow that But-/ must be regarded as a sentence, and one that is complete at least in the sense of having fulfilled the mission for which it was destined. Dr. Blagden takes the strange course of maintaining that syllables and even individual sounds are 'units' of speech, though safeguarding himself by saying that it all depends on what one means by a 'unit.' What I mean by a unit in asserting that the sentence is the unit of speech is that if a chunk of speech be taken for analysis, the unit is reached when one can divide no further without finding something which, taken by itself, is no longer a sample of speech. This is true only of sentences, and not of the words comprised in them. Or if a single word be a unit of speech, as in Come !, that is only because Come ! is not merely a word, but also a sentence. So far from syllables and individual sounds being 'units' of speech, they are not even 'units' of language. The word tenable is a 'unit' of language, but not the sound of b, though this enters into the word.

Dr. Blagden finds a considerable degree of flexibility in my use of terms. But the instances he quotes demonstrate his inability to grasp distinctions which, though fine, are none the less real. I stated, and still maintain, that all words are names of things; and if, on the next page and elsewhere, I connect things with substantives, it is because substantives are the names of things which are presented, entertained, or viewed as things. The 'thinginess' of substantives is a feeling superimposed on the awareness of the things to which they refer. As regards proper names, my argument is intricate and requires careful reading. But when I affirm that the user of the word *Goethe* in fact instructs the listener to think of 'something being Goethe' I am describing the mechanism of the word in speech, a process of which neither speaker nor listener is normally conscious. It is beside the point to object that when someone merely mentions Napoleon we at once think " And who would of the Napoleon. Of course we do.
" call 'Venice' a class-name?" " call 'Venice' a class-name?" Every linguistic theorist is bound to do so, if he wish to understand the working of words. The reason is that it belongs to the nature of words to serve over and over again, and each time a word is used it is applied to a fresh mental occurrence of the thing it names. That occurrence is one of a class of occurrences. In different mental occurrences the thing referred to may vary greatly; the Venice we mean may be Venice in the fifteenth century or Venice in the twentieth. It is useless for Dr. Blagden to condemn the over-subtlety of analyses like these, for they are demanded by the nature of the theme.

Dr. Blagden himself demolishes his next objection. At the end of the same paragraph he declares that I have sought to confine speech to its social aspect. Nothing of the sort; I merely stated that speech is of social origin. It was certainly careless of me to write (p. 206) that "the listener may be a doll, a cat, or nature in "general"; but my next words make it clear that this was mere shorthand for 'a doll, cat, or nature, 'may be addressed in place of a human listener.'

On pp. 138-9 of my book I discuss the important question why the names of certain things naturally attract to themselves the form of a substantive or that of a verb, and I find the reason in the fact that wordform is directly correlated with human interest. Objects of daily concern are the natural substantives. I image this problem in the shape of an inquiry why we prefer to speak of a horse neighing rather than of a neighhorsing. The drift and cogency of my argument are absolutely plain when read in the original context, and Dr. Blagden's caricature reminds me of another cardinal principle of linguistic theory, namely, that the interpretation of speech is dependent not merely on the skill of the speaker or author, but also on the sympathetic understanding of the listener or reader.

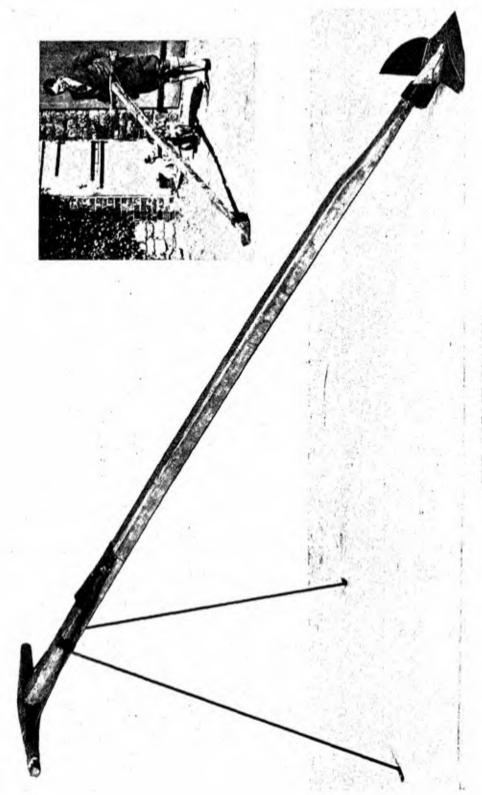
ALAN H. GARDINER.

The Editor has been good enough to offer me room here for a rejoinder; but, as both sides have now had their say, I am content to leave the case to the readers of the book. They are in the best position to decide whether my review, taken as a whole, and within its necessarily limited compass, was or was not a fair appreciation of the author's work. C. O. BLAGDEN.

CORRECTION

Man, 1933, 85. Through a misunderstanding the word crocodile was substituted for alligator in some copies of Man for May, 1933, in the third line from the bottom of p. 85; will those who received such copies please correct accordingly.

P. 83, par. 3, line 6, for B.C. read A.D.



THE BREAST PLOUGH.

An example in the possession of the Science Museum.

Photograph by permission of the Director.

M A N

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JULY, 1933

Fussell.

ORIGINAL ARTICLES.

With Plate K.

Technology: The Plough.

The Breast Plough. By G. E. Fussell.

Still accessionally in remote places there may be seen a man tailing at a breast a

Still occasionally in remote places there may be seen a man toiling at a breast-plough. His labour has an air of remote antiquity and to it has been given at times the reverence due to a remote survival. A shaped oak-beam found in the Glastonbury Lake Village has been supposed to resemble the breast-plough or, rather, the push-plough (a practically identical implement) of the Highlands, and the suggestion has therefore been made that this method of cultivation has a history in this island of some 3,000 years. The Glastonbury implement, however, has a length of over 8 feet while the Monteviot push-plough, with which it is supposed to have points of similarity, is less than 4 feet long; but apart from this, there is the further difficulty that if it was used in Britain in prehistoric times it seems then to have disappeared from view until the end of the Middle Ages. The argument from silence is not a very convincing one, and there are some strange questions yet to be solved regarding mediaeval agricultural implements: how comes it, for example, that despite the numerous references to ploughs with teams of eight or more, no mediaeval drawing that has survived shows a team larger than four? The very earliest knowledge of a plough which we possess, however, is of a primitive implement drawn through the soil by human or animal tractive power.1 But the modern history of the breast-plough is fairly conclusive evidence that in its modern form it is an implement of recent evolution, and, incidentally, in tracing that history we have an instructive lesson in the manner in which agricultural processes have evolved.

A number of writers towards the end of the seventeenth century describe the push-plough or breast-plough as used in the process of burn-beating or denshiring, i.e., paring and burning turf for manure. Sometimes, indeed, the turf was not burnt on the land, but was used as fuel, but it is only with the agricultural aspect of the operation that we are now concerned. Robert Plot gives the fullest description of the process. "They cut the turf," he says, "in the Moorelands in the Spring-"time, with an instrument call'd a push-plow, being a sort of spade, shod somewhat in the form of an arrow, with a wing at one side, and having a cross piece of wood, and the upper end of the helve, after the manner of a crutch, to which they fasten a pillow, which setting to their thigh, and so thrusting it forward, they will commonly dispatch a large turf at two cuts; and then turn it up to dry; which in good weather is done on one side in eight, on the other in four or five days at the most." Earlier in the century this work had been done by mattocks, and although the breast-plough made the labour less arduous, yet it was itself sufficiently laborious, and the writer of the Systema Agriculturae advocated the use of ox or horse ploughs for lightly paring off the turf

2 . Natural History of Staffordshire ' (1686), p. 115.

¹ B. A. Keen: 'The Plough,' Science Progress, XXII Tristram Risdon (ob. 1640): 'Chorographical Description of Devon' (ed. 1811), p. 11.

instead of an implement which had to be "driven by main force with one's breast." ⁴ The proposed alternative made no headway; in all probability it was impossible by this method to obtain compact, uniform and easily handled turves. Throughout the eighteenth and well into the nineteenth century the breast-plough is noticed, and its use advocated. Curiously enough, despite all that was written about it, it seems to have gone out of use in district after district, and to have been revived after an interval as a series of the seri

interval as a new implement.

A writer in the Museum Rusticum in 1764 (pp. 303 ff.) describes the 'Trenching Breast Plough' as used in Lancashire, and appears to regard it as a new device. Some thirty-five years later George Boswell in a Treatise on Watering Meadows remarks that burn-beating or denshiring "is now become " almost general," and that breast-ploughs "can be bought in London and many other capital towns" (p. 18). By 1796 the breast-plough had, it was said, very largely gone out of use in Devon, and appeared to be chiefly in the hands of small farmers.6 Farmers in general, he adds, used the common Team Plow, with some little alteration in the size and form of the share for separating the grassy turf from the soil. In Somerset about the same time paring and burning was unknown.7 In the Cotswolds the use of the breast-plough for paring and burning appears to have been introduced in the seventies or eighties of the eighteenth century.⁸ In the Vale of Evesham a Mr. John Bricknell seems to have introduced the practice; about the same time he also breast-ploughed stubble, but left it to rot through the winter.9 In the East Riding the 'breast-spade' was used for cleaning water furrows and cutting small grips; its resemblance to the 'paring spade' which was also employed was particularly noticed. 10 At the beginning of the nineteenth century Sir John Sinclair advocated the use of the breast-plough for reclaiming waste land in Scotland; he notes that in Devonshire "they use the thigh, and not the breast, for the paring spade," and adds "I propose trying both " plans this summer." 11 Subsequent writers also advocated the method for carrying out reclamation. 12

Experience showed, however, that this method was unsuited to extensive operations of the kind because in a thinly populated district no accommodation could be found for the imported labour, which clearly would be required in fairly considerable numbers as the operation of paring an acre

by means of the breast-plough occupied a man for a whole week.14

Throughout the nineteenth century the use of this method of reclamation was the subject of controversy. In some places it was abandoned, only to be adopted in others; its effect had been considered by many of the writers of the County Reports presented to the old Board of Agriculture. Many farmers used paring and burning to obtain heavy crops, and then cropped the land continuously until the soil was exhausted and tillage was no longer profitable. This habit concealed the advantages and disadvantages of the system, and probably accounts for its fluctuating popularity in different parts of the country. In Westmorland 'push ploughs' and 'paring spades' were introduced with

⁴ J. W. Gent: 'Systema Agriculturae,' (ed. 1697), pp. 231-314. Ed. (1804), p. 181. Louis H. Ruegg, 'The Farming of 'Dorsetshire,' Jour. R.A.S.E. (1855), p. 447. Richard Jeffries: 'Wild Life in a Southern County,' Nelson, Cheap Ed., p. 46. Earl Catheart: 'Jethro Tull,' Journ. R.A.S.E. (1891), p. 7, says the spade used in paring and burning illus. in John Mortimer's 'Whole Art of Husbandry' (1707) is exactly that in use in our own day.

Marshall: 'Rural Economy of the West of England,'

1, 142,

7 Billingsley : ' County Report, Somerset,' p. 120.

Quarterly Journal of Agriculture, V, 17.

Turner: 'County Report, Gloucester,' p. 45.

Leatham: 'General View of Agriculture of East 'Riding of Yorkshire,' p. 80.

¹¹ 'Hints regarding certain measures calculated to 'improve an extensive property' (1802), p. 8.

12 ' Journal R.A.S.E.,' VI, X.

¹³ 'Quarterly Journal of Agriculture, New Series,' 1845-47, p. 313.

14 John C. Morton: 'Cyclopedia of Agriculture' (1856).

Stephen Switzer: 'Iconographia Rustica' (1718), pp. 210 ff. and 245. Society of Improvers: 'A Treatise Concerning the Manner of Fallowing of Ground' (1724), p. 18. R. Bradley: 'A Complete Body of Husbandry' (1727), p. 89. Jethro Tull: 'The Horse-Hoeing Husbandry (1733), p. 135. W. Ellis: 'The Modern'
 Husbandman' (1750), Vol. IV, p. 34. T. Hale: 'A Com-' plets Body of Husbandry' (1756), pp. 90 and 302. Thomas Hitt: 'A Treatise on Husbandry' (1760), pp. 99, 125 and 127. John Mordaunt: 'The Complete Steward' (1761), p. 21. Society of Gentlemen: ' England Displayed' (1769), Vol II, p. 250. Nathaniel Kent: 'Hints to Gentlemen of ' Landed Property' (1775), pp. 85-89 (Against it). Rev. Samuel John Nash: 'An Address to the Board of Agricul-' ture,' c. 1800, Appendix. Sir John Sinclair: 'Hints regarding certain measures calculated to improve an * extensive property ' (1802), p. S. John Boyes: 'On Paring and Burning. Hunter's Georgical Essays,' Vol. V (1804), p. 311. Arthur Young: 'The Farmers' Kalendar,' New

the enclosure of the commons, ¹⁵ but "soon after 1850 paring and burning became a process of the "past," ¹⁶ although in 1845 John Watson, Junr., of Kendal, had pronounced the judgment that "the most effectual method of paring is by the 'paring spade' or 'pushing spade.'" ¹⁷ The date of its introduction is confirmed by Andrew Pringle's recommendation of its use in 1794. ¹⁸

At the same time the practice was still being used in the Cotswolds, where it had been introduced from Devonshire. There it was "usual to clean and plough up the wheat stubble in the autumn, "but sometimes the foulest of the wheat and oat stubbles are left to be breast ploughed and burnt in March and April." In this county (Gloucestershire) breast-ploughing and burning seems at that time to have formed an integral part of the six-course rotation. It was always adopted before planting roots, and frequently after the fold, as well as between the two white crops. Marshall, indeed, remarks that in this county bean and pea stubble was sometimes breast-ploughed previous to sowing. This was a novelty to him, because he had formerly seen the breast-plough used only for paring and burning. This Gloucester practice, however, was not for turning the sod, but directed towards severing the roots of weeds. Much earlier in the century the breast-plough had been used in Gloucestershire and Worcestershire for a quite different purpose. Bradley suggests that it was useful for clod-breaking in land on which turnips eaten off had followed barley. After the addition of heath soil, sharp sand, or gravel, the land was to be "fallowed with a breast plough, which will break the clods and mix the stiff and mellow soil together, so that 'twill be fit for peas the same "spring." 22

On the Cotswolds and in the Thames Valley the breast-plough was also sometimes used towards the middle of the nineteenth century as an alternative to the horse-drawn plough for covering the

autumn manure applied for turnips.23

Similarly it had then (1850) found its way into Somerset as the most approved method of reclaiming waste lands.²⁴ In Wiltshire it was occasionally used, as in Gloucestershire, after the swedes were eaten off, before drilling wheat, barley or oats.²⁵ On the Duke of Bedford's estate two white crops were allowed on new land, "much of which has been broken up in consequence of the Tithe Com"mutation Act," and this new land was usually "breast-ploughed, burned and planted with

" cole-seed," in order to destroy wire-worm.20

The survival of the breast-plough in Gloucestershire, where it is still sometimes used,²⁷ has given rise to the belief that the practice of paring and burning "is immemorial in the Cotswold Hills," ²⁸ and the writer of these words goes on to say that "in 1857 Voelcker described it as 'a practice, the "advantages of which are fully confirmed and explained by modern chemical science." But it is not well to place too much reliance upon the evidence of antiquity drawn from such a source as the memories of men engaged in a rural pursuit. If their memories are those of very old men, and carry them back so far as their grandfather's time, say a hundred years, it seems to their limited knowledge and imagination that what they can recall has always been. One such was an old lady, mentioned by John Orr, who recalled, with enthusiastic admiration, the old days when her father used to do breast-ploughing.²⁹ And it is possible that writers of historical novels may be inclined to apply the

14 Ibid., p. 57.

17 . Journal R.A.S.E., VI (1845), p. 82.

19 ' Journal R.A.S.E.,' XI (1850), p. 136.

20 Ibid., pp. 137 and 138.

21 ' Rural Econ. of Glos.' (1789), p. 114.

²² A General Treatise of Husbandry and Gardening' (1720), p. 45.

²³ John Bravender: 'The Farming of Gloucestershire,' Jour. R.A.S.E. (1850), p. 160.

24 Thos. Dyke Acland and Wm. Sturge: 'Farming of

Somersetshire' (1851), p. 160.
 James Caird: 'English Agriculture in 1850-51' (1852), p. 108.

26 Ibid., pp. 436-437.

27 See illustration 'Gloucester Journal,' 20th March, 1926. The publishers of this Journal state that this specimen "was originally used on the Cotswolds nearly "100 years ago for Potato Planting, and for skimming the ground after the wheat had been cut. There is an attachment tied round the waist for use on hard ground. The natives claim that its use produces the best potatoes." This is confirmed by H. Kirkpatrick: 'An Account of the manner in which potatoes are cultivated (1796), p. 10, and 'An Account of the culture of potatoes in Ireland' (1796), p. 8, but both these writers explain that the breast plough was used for paring before burning and not for cultivation.

Dictoria History of Gloucester' (1907), Vol. II,
 p. 242. See also John Bravender, op. cit., p. 157.
 Agriculture in Berkshire' (1918), p. 39.

¹⁵ Frank W. Garnett: 'Westmorland Agriculture,' 1800-1900 (1912), p. 204.

¹⁸ County Report: 'Westmorland' (1794), p. 50.

practices of their own times to those of the period with which they are dealing, on very slight evidence. Big Jan Ridd, who lived before the Monmouth Rebellion (1685) is made by Blackmore to write: "But in truth I used the right word there for the manner of our ascent, for the ground came forth "so steep before us, and withal so woody that to make any way we must throw ourselves and labour as at the breast plough." The breast-plough seems to have been known in Devonshire at the time in which this story is placed, but it had not then, so far as can be discovered, been passed on to Somerset.

Burn-beating was probably older and was practised there and in other counties at the beginning of the seventeenth century.³¹ But even so late as 1778, while it was the method most commonly

used in breaking up commons, it was not always done with the breast-plough.92

One of the reporters ³² to the old Board of Agriculture describes an implement, similar to the breast-plough, but used in cutting shallow drains: "The breast gripping spade, which is in the hands "of a few... cuts a grip of about three inches in width... The spade is made of a piece of thin "iron, with a socket to admit the end of a shaft three inches broad; each side of the iron is turned "up, which cuts the side of the grip, while the middle or bottom of the iron cuts the bottom of the "grip, and the shaft supports the sod cut out, and a boy with a light spade turns it off, which "expedites the business very much." This must have been the same type of breast-spade as that used in draining in the East Riding at the same time and described by Isaac Leatham. "It is," he says, "driven forward by a man in the same manner as the paring spade, and is not much unlike a common "hay spade turned up at both sides." This implement, if it were really a breast or thigh propelled implement as described by these writers, seems to have been a lineal descendant from and consequent improvement upon the trenching spade recommended by Walter Blith, although it is not, as depicted in his illustration, anything more than an ordinary hand spade fitted with two cutting horns for cutting the sod it was desired to remove.

Some part of the belief that the Glastonbury implement was a breast-plough may be derived from an erroneous impression that the mediaeval spade was always fitted with a short handle, and that the length of the Glastonbury beam is evidence that it was pushed rather than forced into the ground by strength of arm. The writer has, however, seen a spade in use in Surrey which had a straight shaft of six or seven feet long, which was held upright with both hands while the foot was used to drive the heavy narrow head into the ground. Moreover, an examination of the illuminated MSS. of the Middle Ages will correct this impression. There are many drawings of men and women engaged in agricultural occupations, and it is only natural that many men using spades should be depicted. These spades are invariably fitted with shafts of a sufficient length to reach to the shoulder of the man using them; and the foot of the spade is formed of the same piece of wood cut in an elongated semi-circle, the shaft being thinned out to allow a foot-rest. The foot is shod with iron, and is, so to say, placed lopsidedly on the shaft. The iron is sometimes a mere rim, and sometimes a semicircular covering over half the length of the foot. This implement survived in the remote districts of the Western Islands and Highlands until the latter part of the eighteenth and early nineteenth century, and caused a good deal of comment on the part of the reporters to the Board of Agriculture. In this district it was of two forms, the Casdireach, or straight foot, and the Caschrom, or crooked foot. The former was the spade seen so often in mediaeval illuminations, and the latter was that which gave rise to the speculations regarding its antiquity. Smiles 36 says, "the " state of agriculture may be inferred from the fact that an instrument called the caschrom . . . " the use of which had been forgotten for hundreds of years in every other country in Europe, was " almost the only tool employed in tillage in those parts of the Highlands . . .," and, in a footnote, he adds, "The caschrom was a rude combination of a lever for the removal of the rocks, a spade to " cut the earth, and a foot plough to turn it . . . We are indebted to a Parliamentary Blue

^{30 &#}x27; Lorna Doone' (1869), Vol. I, p. 179.

³¹ John Norden: 'Surveyor's Dialogue' (1607).

³² A Farmer: 'An Essay on Divided Commons,' p. 87. See also Philip Miller: 'The Elements of Agriculture by 'Duhamel du Monceau' (1764), Vol. I, p. 87, which recommends a Cobbing How for the purpose.

³³ Tuke, Jr.: 'County Report: North Riding.' 1794. pp. 73-74.

³⁴ 'County Report' (1794), p. 30. The ordinary breastplough was also used here for reclamation. See Wm. Marshall: 'Rural Econ. of Yorks.' (1788), p. 304.

^{35 &#}x27;English Improver Improved' (1652).

³⁶ 'Lives of the Engineers' (1861-62), Vol. II, p. 375. See also James Slight and R. Scott Burn: 'The Book of 'Farm Implements' (1858), p. 148, "apparently very remote origin."

" Book 37 for our representation of this interesting relic of ancient agriculture." Smiles' statement is based upon various dubious assumptions. The reporters mention the ristle or sickle plough (nearly

the figure ascribed to the Roman plough) and the Scottish plough drawn by four horses as being in use on the larger holdings in addition to the lugged and crooked spades. The use of the crooked spade was confined to the smaller holdings,39 and Ure, giving an illustration of the Highland spade which shows it to be exactly similar to those appearing in the illuminated MS.,40 calls it "the simplest and probably the first kind of " agricultural implement in the world." But although the Board's reporters found the caschrom everywhere in use when they visited the Highlands and Islands,41 it was only with difficulty that the Road Commissioners were able to obtain a specimen in 1821,42 and that was specially made "by an elderly person "from the Island of Skye." It seems reasonable to suppose that the caschrom or crooked foot developed from an attempt to adapt the



AN EXAMPLE IN THE POSSESSION OF THE SCIENCE MUSEUM.

Photograph by permission of the Director.

mediaeval straight foot spade to the conditions and requirements of the soil of the Highlands and Islands. In any case the caschrom was not used as a breast-plough. It was driven into the ground by force and thrust forward by bearing upon the foot-rest and on the shaft with the shoulder. There was no wide cross-handle at right angles to the shaft to enable a man to bear upon it with his breast, thighs or stomach. The caschrom was a long-handled spade which could cut off the surface instead of digging obliquely down. Its similarity to the breast-plough ends in its function, and does not rest in its manner of use, so that, even if it were of the antiquity claimed for and to some extent allowed in this paper, it does not assist those who believe the push-plough to have been used from remote antiquity in these islands.

The increasing rapidity of the enclosure movement towards the end of the eighteenth century and the wide interest of improvers in agriculture, combined with the multiplying writers on the subject, allowed processes to become distributed throughout the country with a facility formerly unknown. The practice of paring with the breast-plough, and burning for manurial purposes, had spread almost throughout the country by the end of the eighteenth century. Marshall claims to have originated it in Surrey, where he "pursued it as his own discovery," 43 but in Devonshire, where it had been extensively used, it was by this time almost given up.44 It was, however, practised in many counties at that date, in a greater or less degree, and in the main the paring was done with the breast-plough.45

39 Mr. Marshall: 'Central Highlands' (1794), p. 39.

40 Op. cit., p. 39.

42 Report, p. 94, App. (L).

45 County Reports as follows: George Turner: 'Glou-'cester' (1794), p. 45. John Duncomb: 'Hereford' (1805), p. 100. This writer says it was done by Marquis Turbilly in 1741 (p. 101). Rennie, Browne and Sherrif: *W. Riding' (1794), p. 31. Tuke, Junr.: 'N. Riding' (1794), p. 53. Thomas Davis: 'Wilts' (1794), p. 91. Pringle: 'Westld.' (1794), p. 50. John Fox: 'Monmouth' (1794), p. 19. Peter Foot: 'Midle.' (1794), p. 50. Joseph Granger: 'Durham' (1794), pp. 46-47. Thomas Stone: 'Huntingdon' (1793), p. 13. John Boys: 'Kent' (1794), John Monk: 'Leicester' (1794), p. 52. Rev. Mr. Warner: 'Isle of Wight' (1794), p. 68. Vancouver: 'Devon' (1813), p. 116. See also William Lamport:
'Cursory Remarks on the Importance of Agriculture in its 'connection with Manufactures and Commerce' (1784), 44 Pomeroy: 'County Report, Worcester' (1794), p. 20. p. 72. 'Annals of Agric.,' Vol. VII (1786), p. 60.

³⁷ Ninth Report of the Commissioners for Roads and Bridges in the Highlands of Scotland' (1821), 432.

²⁸ David Ure: 'Dumbarton' (1794), p. 41. Robert Heron: 'Hebudes or Hebrides' (1794), p. 26, 29, 33, 40, 42, 69, etc. Sinclair: 'Northern Counties' (1795), p. 151.

⁴¹ Ure, Marshall, Heron, Sinclair: see also John Macculloch: 'Description of the Western Islands of Scotland' (1819), Vol. I, p. 35, and John Walker, D.D.: 'An * Economical History of the Hebrides and Highlands of ' Scotland ' (1808), p. 125 and 130.

^{43 .} Rural Economy of the Southern Counties' (1798), Vol. I, p. 78.

There are thus some grounds for believing that the breast-plough originated in that county; it may be as a development of the clodding beetle, which possibly suggested the device to the farmers of its small old enclosures, who wished to reclaim their wastes. A passage taken from William Marshall's remarks on West Devonshire lends some credence to this idea. 46 There paring was done with an adze of special construction, "in using which the workman appears from a little distance "to be beating the soil as with a beetle, rather than to be clipping off the sward with an edge tool." He goes on to say: "The next instrument in use is the Spade, resembling the paring spade, or breast " plough of other Districts, with, however, in some instances, at least, a notable addition " (which, by the way, seems to have been common enough), "namely a mouldboard! fixed in such a manner " as to turn the sod of turf, as a plow turns the furrow slice: thus becoming literally a Breast Plow." It had certainly become an instrument in very general use during approximately the hundred years, 1750-1850, when the allocation of the land was being made, and so much reclamation work was consequently done, often by farmers, ill-equipped with implements or capital, who were obliged to use the best methods to hand; and, with the cheapness of labour, man-power was often cheaper than the purchase of expensive and untried implements, the efficacy of which was frequently dubious, so that a simple implement like the breast-plough made an immediate and comprehensible appeal. When the work had been done the implement began to disappear. Its utility had vanished, and now it once more sinks into oblivion.

It is, however, interesting to notice that the French have re-invented this implement for light work, such as in the farm kitchen garden, under the name of *Charrue à Bras*, and that in this modern form it is fitted with a wheel; ⁴⁷ something similar seems to have happened in the early years of the eighteenth century. In 1725 some Italians brought over a plough, which they gave us as a new invention, but it proved to be the same as the breast-plough used in Worcester, Gloucester, and some parts of Stafford.⁴⁸

G. E. FUSSELL.

46 'Rural Economy of the West of England' (1796), (1922), p. 518.
Vol. I, p. 142. See also Vol. II, p. 264.
47 'Journal d'Agriculture Pratique, Nouvelle Serie 38' p. 179.

Ireland: Archæology.

Excavation of a Horned Cairn at Goward, Co. Down. By Oliver Davies and E. Estyn Evans.

117 The monument in question is one of a group on Goward Hill (688 feet), 2 miles east of Hilltown, Co. Down, immediately to the north of the western Mourne Mountains. It was excavated completely in May, 1932, by the authors of the paper and Miss Gaffikin. It belongs to the group of horned cairns with a semi-circular forecourt (see plan)—at the east end. The maximum measurements of the cairn are about 115 × 50 feet by 6 feet high. The material of the cairn consists of loose stones with a certain amount of earth. The original shape appears to have been roughly parabolic, but its limits are somewhat irregular, especially on the south; we observed no trace of a peristalith, except possibly at the north-east angle. Extending for 28 feet behind the horns are three aligned chambers, with no covering, but full of earth and stones.

An unusual feature is the asymmetrical disposition of the horns, the north horn having six uprights and the south three, with two portal-stones between. Nor had the south horn originally extended any further; a trial trench failed to find any disturbance in virgin soil on a line continuing it; moreover, the stones as they stand form a nearly true semicircle, and the east edge of the cairn behind the north horn is aligned on the terminal stone of the south. The diameter of the semicircle is 37 feet.

The three chambers are separated by two sills formed of single blocks, reaching to about half the height of the chambers; the west end is blocked by a larger stone, 4 feet 8 inches high. These three stones, which rest approximately on the original level of the virgin soil, clearly occupy a key position in the construction of the monument, and if they had been moved the monument must have collapsed. Flanking these three stones are three pairs of jambs, on an average 4 feet 6 inches

A full report of this excavation was read before the Archæological Section of the Belfast Natural History
Proceedings later.

high; and against them the orthostates of the central and west chambers rest, being tilted slightly in. We know of no exact parallels to this method of construction, except in a horned cairn just north of Belfast.

Both jambs and side-walls are carried up to a uniform level throughout, and this may have some bearing on the roofing of the chambers. The east chamber presents several abnormal features; its

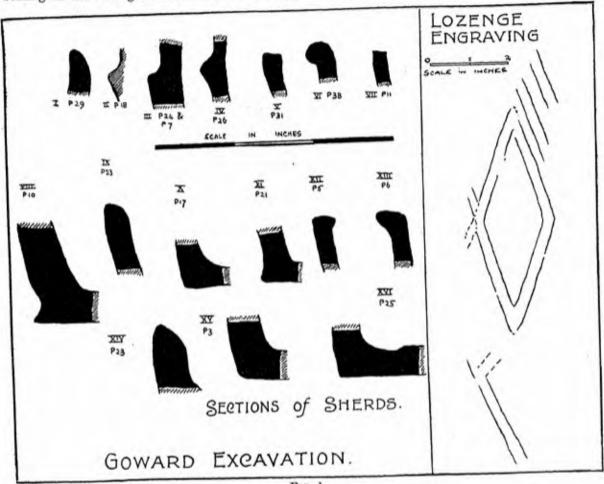
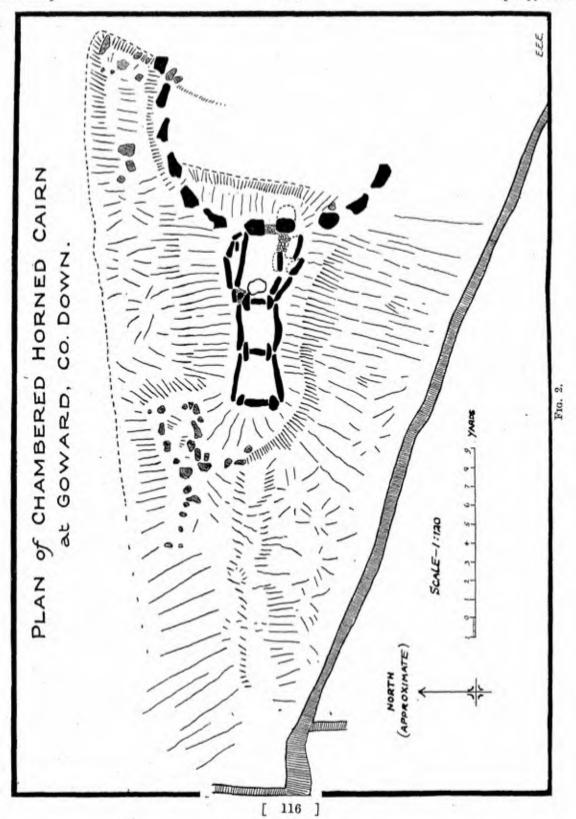


Fig. 1.

central axis is some 10 degrees south of the main east-west axis of the monument, and its eastern end is partially blocked by the two portal-stones, the southern of which is leaning to the east against a bank of earth and stones blocking the entrance and continued across the forecourt. Between the portal-stones the entrance, 2 feet wide, was closed with a low wall of rough dry stones. On each side is a double sidewall; the inner wall on the south side was partially composed of built-up stones, which had apparently been placed in position after the collapse of the south portal-stone.

The eastern chamber was further differentiated from the others by its contents. In the central and west chambers was a layer of black humus at about the depth of the top of the sills, pronounced to be of more recent date than the oak charcoal at the bottom of the chambers. Just above virgin soil was a layer of brown earth, which yielded pieces of charcoal and a few sherds; virgin soil is fairly level in the central chamber, but there is a pit in the west chamber filled with loose yellow gravel. In the east chamber the humus layer was in the east half immediately above the brown earth which rested on virgin soil; in the west half is a slab laid horizontally and packed around with yellow clay,



just in front of the sill; it rests on several smaller stones which are sunk into virgin soil. Above this in the stone filling, between depths of 3 feet and 4 feet 6 inches below the tops of the jambs, were twenty-two small packets of ox-bones, clearly intentionally deposited. The only sherd from this chamber came from the top of the clay packing round the flat slab.

The bulk of the pottery came from the level forecourt just to the east of the bank blocking the entrance. It was found in a black sticky paste which coated a number of flat stones, apparently arranged in no orderly plan. Pieces which seemed to belong to the same pot were nearly always found close together. There were also found several quartzite pebbles, a good deal of charcoal, and

an unworked burnt flint.

The pottery may be divided into two groups, coarse and fine; all the fragments were very small, and none was decorated. The fine wares were slipped, and in some cases highly polished, either red or black. So far as it has been possible to reconstruct shapes, they include two pots with splayed rim, concave neck and fairly straight shoulder (No. I, Fig. 1); several pots with relief-rib on the shoulder (Nos. II, III, IV, Fig. 1); two flattened rims, one of which came from the west chamber (Nos. V, VII, Fig. 1), and a hooked rim (No. VI, Fig. 1). The coarse pottery included some fragments with wash on the inside; the principal shapes were rims usually flattened and slightly splaying inside or outside (Nos. IX, XII, XIII, XIV, Fig. 1), and flattened bases sometimes splaying (Nos. VIII, X, XI, Fig. 1), one of which came from the central chamber (No. XV, Fig. 1); also the bottom part of a bucket-shaped pot with flat base slightly grooved on the inside (No. XVI, Fig. 1). All the sherds were hand-made domestic ware; though individual ones suggest possible Neolithic parallels, the pottery as a whole appears to belong to the Hallstatt-la Tène complex.

The bones have been examined by experts, who express grave doubts as to their contemporaneity with the monument. Their intentional deposition suggests a sacrifice at some date; there is evidence of ox-sacrifices in Western Scotland and the Isle of Man within the last 300 years, in one case

connected with the opening of a prehistoric monument.

A stone found loose on the cairn behind the north horn had on one side an engraved lozengeornament of shallow grooves (see Fig. 1). This ornament is found at Newgrange and at Lougherew, and there is no reason to suppose that it is not contemporary with the construction of the monument.

O. DAVIES.

E. E. EVANS.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Initiation Rites and Kinship Bonds in Tikopia. Summary of a Communication presented by Dr. Raymond Firth. 13 June, 1933.

The name of initiation rites has been given to a number of different types of ceremony, including on the one hand those which admit to a secret society, an age-grade, a medicine lodge or a club, and on the other those which facilitate or emphasize the passage of a person from one social state to another, as from adolescence to manhood. The former may be termed rites of specific initiation, the latter rites of general initiation. A definitive sociological study of rites of this general type can only be done on a broad comparative basis. The precise rôle which they play in the social life of the community where they occur must be analyzed, their capricious distribution investigated and the fact explained that rites for females are often but a pale reflection of those for males, or may be entirely lacking. But first is the need for more adequate specific studies which will describe the initiation procedure carefully, not merely as regards technique and sequence of operations, but indicating also the actual native attitude towards the various elements of the ritual, the sanctions which maintain it, the reaction in the person initiated as distinct from the basic function of the institution for the society as a whole.

Initiation in Tikopia consists in essentials of the operation of supercision, a longitudinal slitting of the upper surface of the prepuce, practised upon young males, usually two or three together, some time before puberty. This is accompanied by the distribution of huge quantities of food and other property, regulated upon the basis of kinship to the initiates. A similar ritual, but on the economic and social side only, is sometimes performed for girls. Initiation is known as the pupaumu, literally

"the kindling of the ovens," this embodying a ritual expression of sympathy. The operation is performed by a skilled man, the tufuna kaukau tanata, and he is assisted by the tanata me, who holds the boy in his arms. Both these men must be of the group of tuatina, mother's brothers, real or classificatory, of the lad, and are rewarded for their services in common with all the other tuatina with gifts of sinnet cord, bark-cloth and mats, and food. These are reciprocated, at least in part, and the exchange of such valued property on the basis of the alignment of the boy's kin is one of the

fundamental features of the ceremony.

Initiation in Tikopia is decidedly atypical when compared with that in other parts of the world. The operation is in no way designed as an ordeal to try the lad's courage; on the contrary the pain is minimized as much as possible. There is no formal instruction in the secrets of tribal lore or in morality, no seclusion of the initiate, no ritual separation from women, no dramatic representation of re-birth, and food taboos of only the slightest kind are kept. Yet the ritual is of the greatest importance to the people. Its manifest sanctions are conformity to religious precedent on account of its alleged supernatural origin, and so far as the actual operation is concerned, the sensitiveness to ridicule which would be directed against anyone who did not undergo it. The fundamental value of the institution lies, however, in the manner in which the economic exchanges form a pattern of social ties, and particularly for the individual concerned, the explicit expression and affirmation of his status among his kinsfolk which the whole ritual impresses upon him.

The Myth of the Mystic East. Summary of a Communication presented by Lieut.-Colonel R. H. Elliot,

M.D., F.R.C.S. 20 June, 1933. There is a widespread belief that the East is the Home of Mystery. Against this we must set the indisputable fact that as knowledge has progressed the territory of the supernormal has been steadily taken over by the normal. Man is man wherever you find him, be his colour what it may, and when known is no more mysterious in one land than in another. Inaccessibility has meant a difficulty in checking statements and so has been the handmaid of mystification. The average mind loves the occult. The impact of the East on young European minds has in many ways been provocative of mystery, and this was pre-eminently so in the early days of our dealings with India. It has always been very hard for the East and the West to understand each other. The language difficulty is a great barrier to entry into the feelings of strange peoples, and especially into those of nations who deliberately use speech to conceal their thoughts. Social conditions are very different in Britain and the Orient. The system of family life is different. The Purdah System, formerly very powerful, is still in active evidence. The physical influences environing Oriental peoples are strange and marked, especially their poverty. Sudden death is common in the East from accidents, epidemics and murder. A wholly undeserved reputation has been obtained by oriental drugs and oriental methods of treating disease. Conjuring and magic have been invested in the Orient with a halo of mystery which has been in no way deserved. Political influences have been most important: the oppression and tyranny of the past were associated with total insecurity of life and property. The contrast between Western and Eastern religious systems is and always has been very great: the ideal of the West has been active well-doing; that of the East idleness and negation of responsibility. Sadhuism, witchcraft, phallic worship, and the conflict between Hinduism and Mahomedanism, have all been factors making for mystery. Graft is common both in the East and in the West, but the attitude towards it is widely different in the one and in the other.

All these points have favoured the pretentions of the East to mystery, but whenever such claims are fearlessly met and investigated in the light of modern knowledge, they break down hopelessly. They are based on misunderstanding of facts, on inaccurate data and on faulty reasoning.

REVIEWS.

AFRICA: Ethnology
The Tribes of the Ashanti Hinterland. By
Captain R. S. Rattray, C.B.E., D.Sc. (Oxon), of the
Gold Coast Political Service. With a chapter by
Professor D. Westermann. Oxford: The Clarendon

Press, 1932. 2 vols. xxxii + 604 pp. 158 illustrations and a map. Price, 45s. net.

A new book by so distinguished a field-worker as Captain Rattray cannot fail to arouse the interest of anthropologists. His latest double-decker will, however, be sought after not only because of the author's reputation, but more so by reason of its intrinsic importance. It opens an ethnological field of extreme richness, the surface of which has hitherto hardly been scratched. It presents the results of a survey of the twenty or so tribal groups, numbering some half a million souls, which inhabit the vast area of the northern territories of the Gold Coast.

Captain Rattray spent two years in this area-and one can only stand amazed at the wealth of material he gathered in so short a time. His observations, recorded with almost relentless specificity of detail, in document after document, most of them translated from the vernacular of his informants, are full of meat for the theoretical anthropologist, the missionary, the administrative officer, indeed, for anyone concerned

with the peoples of West Africa.

The most obvious reproach one could cast against the book is in regard to the mode of presentation Captain Rattray was compelled to adopt. He treats each of the tribes he studied separately, some at greater length than others, taking in turn each of the sociological features he selects for investigation. The effect is a seeming patchwork, necessitating a good deal of cross-referencing fortunately a simple task, because of the excellent index and the careful system of paragraph headings) in order to obtain a complete picture of a set of customs or an institution. However, this has its advantages for the desk-worker who may wish to use the book as a source. By doing the job of synthesis for himself, he not only checks the internal consistency of Captain Rattray's observations—a test which, needless to say, they pass easily—but is led to see their wider implications, at which Captain Rattray merely hints. all, he is made aware how one custom or institution interlocks with the others described here, and gains its full significance from its connections with the rest of tribal life.

On the whole, Captain Rattray eschews theoretical commentary, being content to set down the facts as facts. Nevertheless, one of the most notable parts of the book is the preface, aimed, it would appear, chiefly at the administrative officer. Here he draws out the upshot of his researches, and demonstrates, on anthropological grounds, why pencil-and-paper constitutions, however trim, and however satisfactorily they may fit such broad general conceptions as that of

Indirect Rule, may not work in practice.

Despite the author's abstinence in matters of theory, the reader cannot avoid being constantly stimulated to more general inferences and lines of thought. Captain Rattray shows, by a comprehensive analysis of linguistic data, confirmed by Professor Westermann in a valuable independent chapter, as well as by his ethno-graphical material, that the peoples of this area are all culturally akin. While variations in custom, sometimes considerable, occur, even from settlement to settlement, the type can be traced right through.

The point of interest for sociological theory is that these variations appear to be correlated with the demographic distribution of the population, with distinct features of social organization, and with historical events which can to a certain extent be verified in existing conditions. We discover that the real unit of cultural life, over most of this area, is a family or kindred group occupying a single compound or quarter of a "town," these compounds often being scattered at considerable distances apart. Furthermore, though membership of the totemic clan descends in the paternal line as a rule, the line of descent through the mother is also recognized, often by name, in marriage prohibitions, and in the choice of guardian spirits for children.

Wives have, in consequence, to be sought fairly far afield, which leads to intertribal marriages. Many of these tribes have also a tradition of migrations, while others have been under the more or less effective control of bands of "foreign invaders," who now form a superior stratum in such tribes as the Dagomba and Mamprussi. The history of migrations was neatly confirmed, in one case at least, by the discovery of corroborative traditions in different parts of the country, which cannot be explained by diffusion.

This by no means exhausts the theoretical interest of the book. Captain Rattray initiates a new procedure in field work, by including a fairly complete account of many Nankanse customs written down for him by a member of that tribe. The fascination of this part lies in its intimate portrayal of the everyday life of the people. Birth, marriage, sickness, and death-all those vicissitudes of human life which are surrounded with ritual-are here seen as events in the life of a living person, and not as occasions for the ideally mechanical and consistent ceremonial of the ethnographer's version.

But Captain Rattray's book is so full of solid provender for the anthropologist, and for workers in neighbouring sciences, or for the practical man, that one could continue to talk about it for several pages. I can only refer to his exceptionally full documentary material on the institution of the Ten'dana, or Priest-King, as he not too happily translates the title, on the widespread practice of soothsaying, on the cult of ancestor spirits, and on the totemic beliefs of the natives. The Ten'dana will attract greatest attention from adminis-trative officers. As the semi-sacred custodian of the land, he appears to be the point of convergence, as it were, of a large number of tribal interests—religious beliefs, tribal tradition, the economic exploitation of the land, the maintenance of law and order. In regard to soothsaying, I cannot forbear complaining that Captain Rattray does not say more about witchcraft, which he mentions incidentally in several places. Indeed, such incidental remarks are amongst the most intriguing things in the book. For instance, he tells us, in a footnote, of a former custom of going raiding after a funeral. This custom of assuaging grief by fighting has a bearing upon the whole psychological theory of the nature of human emotions.

Captain Rattray's new book is a worthy successor of his well-known works on the Ashanti. Well printed, generously illustrated, and massive with first-hand documents, it will undoubtedly rank among the best M. FORTES. ethnographical books of the year.

ARTS AND CRAFTS.

Primitive Arts and Crafts. By R. U. Sayce. 201 pp. Cambridge University Press, 1933. 8s. 6d.

The title of this most useful and stimulating book is misleading. It is not an account of the several technical processes employed among so-called "primitives," nor yet a description of the total material culture of selected "primitive" peoples. These remain desiderata. But Sayce's book fills a no less real need very satisfactorily. He discusses philosophically, but yet concretely, the general principles with which the historian of culture must operate and brings to the illustration of the problems raised the results of practical research as geographer and ethnographer.

We are reminded of the sociological, economic and religious implications of most manufacturing processes in primitive societies. The relation of culture to environment is acutely analyzed, and the extravagances of those who see in geography the sole determining factor are ruthlessly exposed. Incidentally the prehistoric archæologist is warned (perhaps needlessly) of the

caution needed in taking present plant distributions as a basis for botanic maps of past epochs. The idea of a culture area, so popular in America, is fairly, but critically, expounded. The author points out how, besides contemporary environment, the prior history of a people conditions its material culture. Race must also be taken into account : in estimating its rôle, Sayco is cautiously orthodox. The discussion of discovery and invention is naturally dominated by Dr. Harrison's masterly analyses, though his definitions are not accepted without criticism. Sayce is able to point to instances of deliberate quest as the prelude to a discovery among the Maoris for instance.

The last five chapters are devoted to diffusion-mechanism (travellers who collect curios, guest-gifts, nomadic tribes as intermediaries, mobility of labour, migration, including the several types thereof), conditions for and against the acceptance of the diffused idea (prestige of introducers and conservatism or excessive specialization of (non)-recipients and their causes), geographical and religious barriers, and so on. Finally, the possibilities of parallel evolution are stated so objectively that the author can no longer be claimed as a one-sided diffu-sionist in the sense of Gräbner or Elliot Smith.

All the points examined are illustrated by relevant and generally well-documented instances. Sometimes the same example is used to illustrate several points : the discovery of New Zealand flax by the Maoris as a substitute for paper-mulberry bark illustrates deliberate quest by primitives (p. 62), results of change of environment on a culture (p. 77), and consequent modifications in technique (p. 167). Very exceptionally the example is unfortunate; leather-inspired pots can be better illustrated from Troy than from Susa, where the model is now seen to be more probably basketry; and the Susa pot is said to come from Kish! The index might easily

But Sayce's book does provide just the sort of material the archæologist needs for the solution of his own problems and that in a cheap, concise and readable form. V. G. C.

Les Peintures Rupestres Schématiques de la Péninsule Ibérique. By L'Abbé H. Breuil. I Au Nord du Tage. Lagny-sur-Marne. 24½ × 16 in.

1933. 76 pp., pl. 24.
All prehistorians will welcome the appearance of this Not only are its contents of importance, but since it is the first of a series made possible under the auspices of "la Fondation Singer-Polignac" there is every chance that more still of Professor Breuil's mass of information on the Spanish rock-shelter art which he obtained during years of work in the field will at long last be suitably published. Some of his friends had feared that the pressure of the Abbé's subsequent work in an ever-widening sphere of interest might have delayed the writing up of his earlier investigations

indefinitely.

The present volume is mainly concerned with the conventionalized and semi-conventionalized rock-shelter paintings of Batuecas, a valley in the south-west corner of the modern province of Salamanca. Those who know their Borrow will remember that he was told : "Yonder, far to the west, in the heart of those hills, "there is a wonderful valley, so narrow that only at mid-day is the face of the sun to be descried. That valley "lay undiscovered and unknown for thousands of years; " no person dreamed of its existence. But at last, a long "time ago, certain hunters entered it by chance, and then "what do you think they found, Caballero? They found "a small nation or tribe of unknown people, speaking an unknown language, who perhaps had lived there since

"the creation of the world, without intercourse with the " rest of their fellow creatures, and without knowing what "other beings besides themselves existed! Caballero, did " you never hear of the valley of the Batuecas?" less most of this was mere folk tradition; yet was it in part a memory of Copper Age and earlier times when the valley was used—perhaps because for some reason it was held to be sacred—as a place where rock-shelter paintings should be made? Similar paintings do not occur elsewhere in the neighbourhood. Professor Breuil himself long ago published, in l'Anthropologie, a brief account of the results he obtained from studying the paintings at Batuecas, but in the present volume everything is on a much more sumptuous and detailed scale, and many of the illustrations are in colour. The earliest stratum of paintings may be mesolithic in date, the later ones appear to belong to the large Copper Age art group.

As well as descriptions and discussions of these paintings at Batuecas the volume contains an account of a number of more or less isolated art finds at several different localities just over the frontier in Portugal, and in the Spanish provinces of Segovia, Burgos, Palencia, Cantabria, and Asturias. While most of these have also been published, they are not readily accessible to students and it is an excellent thing to have them now brought together. Finally there is a chapter on the painted dolmens in Portugal, and here again the existing publications on this subject are very difficult to obtain. Professor Breuil is once again to be congratulated on having produced a really valuable work. We shall all look forward to the other volumes of the series. He has much material collected from the Sierra Morena and from districts to its west which has never yet been published. May it soon see the light of day.

M. C. BURKITT.

BLOOD GROUPS.

Handbuch der Blutgruppenkunde. Edited by 1932. J. F. Dr. Paul Steffan. München. Lehmanns Verlag. xi + 669 pp. 125 text figures and 3 charts.

Collaborators: Professor Oluf Thomsen: Blood Groups and Serology; Blood Groups and Morbidity. Dr. Michael Hesch: A Brief History of the Science of Blood Groups, with a Bibliography of 2,926 items. S. Wellisch: Heredity of Blood Groups. Dr. H. Bürkle-de la Camp: Blood Groups in relation to Medicine and Surgery. Professor Gottfried Rastrup: Blood Groups and Forensic Medicine. Dr. Paul Steffan: Blood Groups and Human Races. Dr. E. D. Schoett: Technique of

Blood Grouping.

It is not quite an easy task to give full justice to this Handbuch within the allotted space. It is a repertory of present-day science on blood groups, yet it may be said, in the fairest spirit, that it shows all the merits but some of the drawbacks of a collective work. The first chapter on the history of the science of blood groups gives a brief and apparently exact description of the development of the theory and practice of isohemagglutination, Landsteiner's and Jansky's definition of the four blood groups in man, later on the beginnings of investigation into the heredity of blood groups with regard to mendelism, familial occurrence and constitution.

The relation of the study of isohemagglutination to blood transfusion, and especially to anthropology, is referred to; blood groups in different races and also in apes and monkeys.

The next chapter, by Professor Oluf Thomsen, of Copenhagen, is a very important contribution to the whole theory of isohemagglutination; first of all it gives the full serological basis for the whole question of blood types and their differentiation. Then follow some instructive chapters on the distinction of the four blood types and sub types, especially the A_1 and A_2 type, on the isoagglutinins, precipitins and cytotropins and the importance of thermal influence. The occurrence of isoagglutinins apart from blood serum is discussed, and further the blood types in apes and monkeys, different mammalia, birds, etc., are described. Altogether this chapter, based on extensive experiments by Professor Thomsen and his co-workers, gives to every anthropologist and investigator into blood types, who may not be familiar with modern serology, full and exact information on the theory of isohemagglutination.

The chapter on hereditary factors in the different blood types is rather difficult for those not sufficiently familiar with mathematics, and even with the help of mathematicians many statements were not quite elucidated. Many an anthropologist, biologist and medical man will admit that the over-use of mathematical formulæ in the realm of morphology and biology has many times hardly fulfilled expectations.

The chapter on blood types and pathology by Professor Oluf Thomsen is most interesting. Heredity and constitution, blood types and malignant tumours, tuberculosis, syphilis, malaria, nervous disorders and mental cases, arthritis and decay of teeth are discussed and the respective references are given. Undoubtedly this part of study, blood types with regard to constitution, heredity and pathology, may be of importance, provided, of course, that the material is properly selected and that the number of cases is sufficient. The chapters on blood transfusion and on blood types in relation to forensic medicine give really full information on these more practical topics, especially the technique of blood transfusion and its modern use, and also the whole question of the legal value of blood types in relation to

civil and penal proceedings.

The problem of racial significance of blood groups is fully discussed in the following chapter by Surgeon General Dr. P. Steffan. Over thirty pages give a detailed list of percentages of the four blood types amongst different races, together with their respective 'racial' index. The different 'racial triangles' and 'bloodgenographic racial groups,' etc., do not seem to simplify matters. The exact comparison of the different racial groups seems to be rather a difficult task, for the numbers of cases in each racial group are very different, the range of variation being from some 27 cases in one group up to some 12,000 in another group. Mr. Wellisch, on page 206 of this Handbuch, states as a sufficient number of cases from 250 up to 500 and even 1,800, according to the 'presumed' accuracy of the investigator. It is rather difficult to understand how a presumed personal quality like accuracy may be expressed mathematically. In connection with the question of the racial significance of blood groups the reviewer would like to quote M. Young's paper in Max 1928, 116, which concludes that the respec-tive results "should be sufficient to convince the most "ardent supporters of blood grouping as a criterion " of racial type or racial relationship that it may not be " of such importance in this sphere as they anticipate." Contrary to this Dr. Steffan, the author of this chapter on blood types and race, is far more optimistic about the significance and value of the different blood groups with regard to the question of races and also with regard to phylogeny of man. The reviewer's own experience of over 4,000 cases in Czecho-slovakia, leads to rather more sceptical conclusions.

The last chapter of this Handbuch, on the technique of blood grouping, is very instructive and treats the whole of the subject in full. Dr. E. D. Schoett, Stockholm, who has considerable experience, gives full instructions for laboratory and for field work. The author prefers puncture of the earlobe for the blood tests; we prefer the ulnar edge of the palm of the left hand, which is always easy of access, easy to clean, the least painful and, after the puncture, not troublesome. The puncture of the earlobe is in many women with complicated hairdress almost impossible, besides this it is often impossible to keep the earlobe quite clear on account of the hair, especially in girls and women with bobbed hair. The last hundred pages of this Handbuch contain a complete bibliography relating to blood groups for the years 1901–1931. This handbook is an encyclopedia of our present-day knowledge on blood groups, useful to all investigators, anthropologists, biologists and pathologists. The printing and illustrations are excellent.

ASIA.
The Empty Quarter. By H. St. J. B. Philby.
London, 1933. $9 \times 5\frac{1}{2}$ in. 433 pp., folding maps.
Price 21s.

The Wali of the Wahabi King in the Hasa postponed a proposed journey by Mr. Philby across the Rub'al Khali by one year, and in the meantime Mr. Bertram Thomas made his new famous journey across the eastern part of the mysterious region. This may, in a sense, damage Mr. Philby's rights to priority, but his special knowledge of Arabia is too widely appreciated for that point to have any importance. Mr. Philby's route lay well to the west of that of Mr. Thomas and while the latter found, chiefly, a very bare steppe, the former crossed a real empty quarter. The Rub'al Khali which seemed to become a little mythical after Mr. Thomas's experience is now recognized, thanks to Mr. Philby, in all its forbidding majesty. The evidences of early man were very slight and Mr. Philby remarks that some day digging in the alluvium of an ancient dried river may reveal them; for, he thinks, the inception of Arab desiccation may be fairly recent. Some who have worked at the tangled question of Pleistocene climates wonder whether South Arabia, for reasons too intricate to argue out in a review, may not have been desertic for long phases in Pleistocene times. But, however this may be, more exploration for remains of Pleistocene man or fuller demonstration of their absence is very seriously needed. This could help us to make one of the most valuable steps forward in the reconstruction of the story of early homo sapiens. All the flints that Mr. Philby collected could be dated to Neolithic or later times. No trace of Palwolithic man has yet emerged. The exploration of the site of the supposed city of Wabar (Aubar, Obar) is a valuable feature of Mr. Philby's work. He found the crater-like forms that had been moulded by impact of meteorites with the surface of the desert. Mr. Philby, tracing the ancient rivers now dry, strove to reconstruct the map of the conditions of those days and obviously was disappointed at the sensational ending to the dreams of the fabled city that the imagination of many had connected with the story of Ophir. The book includes as appendices scientific reports on a number of matters by various authorities. The shells discovered in superficial deposits were those of freshwater mollusca of species now living, a typically Syro-Mesopotamian association without special affinities to the recent faunas of North Africa. Unio terminalis, found in several places, is a lake form at the present time.

Myamma Min Okchokpon Sadan. 2 parts, 9½ × 6½, pp. 23 + 271, 20 + 312. Rangoon: Supdt., Government Printing and Stationery, Burma, 1932.

As its title indicates, this is a book on the Public

Administration of Burma in Burmese times. It covers a period of over five centuries, from the reign of the Shan King of Ava, Min Kyiswa Sawke (1368-1401), to that of King Thibaw, who was deposed by the British in 1886. Besides historical information, it contains much that is of great interest to the research student regarding old customs and beliefs of the Burmese.

For the information given, the compiler, U Tin, has had recourse not only to royal orders, vernacular histories of Burma and Arakan, records of the Hlutdaw, or supreme court, stone epigraphs and inscriptions on pagoda and monastery bells, but also to private documents which heretofore do not appear to have been made public, and the subjects range from coronation rituals and the duties of kings to the duties of slaves to their masters. There are also sumptuary laws which include rules prescribing the kind and texture of cloth

to be worn by persons of each class of society.

Some of the depositions of thugyis, or village headmen, that were recorded when the Sittan, or Revenue Inquest, of King Bodawpaya was made in 1784 contain curious details. For example, every villager who grew hinnunwe (spinach) had to give the headman a bundle, and those who grew gourds, two gourds; each householder was bound to give him a bundle of firewood a month, and when a buffalo or ox died, the thugyi was entitled to receive two ribs of beef, a privilege which must have been appreciated when the slaughter of cattle was strictly forbidden on religious grounds. When the headman died he was buried, or burnt, in a specially-When the ornamented coffin. Some of the depositions show that gynæocracy existed in certain villages where the thugyi was always a woman.

The population of Burma, according to this inquest, was about two millions. It is now well over thirtoen millions, but the hill-tribes could not have found a place in the Census of 1784. Bodawpaya's Sittan is regarded as forming an epoch in the rural annals of Burma. It was based on the sworn statements of village headmen, and forms a complete record of the population and resources of the Empire, and as the boundaries of headmen's jurisdictions were recorded it is referred to even at the present time. Like the English Domesday Book of 1086, it was popularly regarded as an instrument of fresh exactions.

Impalement, it has been said, has never been a legal penalty in Burma, but on p. 5 of Vol. II it is mentioned as being one of the thirty-two kinds of punishments which kings may inflict on their subjects. Of the

Ordeal, Oath, Act of Truth (cf. Man, 1933, 100).

SIR,-With reference to the most interesting

remaining thirty-one, nearly all are abominably cruel according to our notions.

At the end of the book is an account, which evidently has been taken from private sources, of how Thibaw, the last of the Burmese kings, came to succeed his father instead of one of the elder princes, of whom there were many; and it is stated that, during the first year of his reign, the young King had resolved to visit London, and actually had begun to select the members of his suite, when he abandoned the project owing to the opposition of Queen Supyalat and a favourite Minister, the Taingda Mingyi, who feared, doubtless with good reason—for distrust and treachery between brothers has been the inveterate canker in the royal families of Burma—that one of the senior princes might seize the throne during the King's absence. Had Thibaw made this visit the subsequent history of Burma might have been written differently, the wholesale massacre of princes and their families, a massacre which greatly exceeded the number of persons executed in all previous massacres, might not have taken place, and Thibaw would not have gone down to posterity as Madayat-pa Min, the King who was taken to Madras. W. A. HERTZ.

MISCELLANEOUS.

Kunst der Naturvölker (Sammlung von Eduard von der Heydt), Africa, Ozeanien, Indonesien. By Eckart von Sydow. Berlin, 1932.

Cassirer. x + 215 pp. Pl. 207 + 2. This is a book in which illustrations—excellent illustrations-are predominant over text. The objects figured were collected by Baron von der Heydt to illustrate the religion and art of certain backward peoples, and he has succeeded in getting together an assemblage of carvings, chiefly in wood, which would do credit to a large museum. Africa is by far the best represented area, especially, as is natural, the West and the Congo. Cups, boxes, staves, stools, figures (ancestral and other), masks and heads, are figured. From the Pacific are objects from New Guinea, New Ireland, the Admiralty Islands, the Solomons, New Hebrides, and a nesia is very sparingly represented.

The assembling in one volume of photographic reproductions of a collection of objects from several parts of the world is scarcely to be commended for reference purposes, unless it can be made representative, but the book may be accepted as a valuable record of H. S. HARRISON. native art.

CORRESPONDENCE.

article of Mr. Codrington (Man, 1933, 100) on was made by the Editor of Man concerning the existence of similar things in the classical European area. On the whole, it must be said that there is no close parallel from either Greece or Rome. The subtle reasoning on which, according to Mr. Codrington's doubtless correct interpretation, the Act of Truth depends for its expected efficacy is clearly not of popular origin, but a product

the Act of Truth in India and Ceylon, an enquiry of Indian philosophy; that some such reasoning was in existence among the higher classes of Indians in quite ancient times is evident from his reference to the Greek philosophers likewise had the Mahabharata. conception of the inexorable causal connection uniting all events, past, present and future; it is the εἰμαρμένη of the Stoics, and finds less exact expression in the ανάγκη of ordinary speech. But it does not seem ever

to have occurred to any Greek to attempt to make this, so to speak, work backwards, so that if a wished-for future event, coupled by verbal formulæ with a true statement concerning the past, did not occur, the past event would become somehow untrue. For if I understand Mr. Codrington rightly, some such coupling of past and future, or past and present, is a feature of Acts of Truth. The Cingalese litigant is invited to say to his wife, "Lady, dressed as you are in a red sari, did you not "tell me this?" Buddha's miracle would appear to imply the wish, "If this child was begotten by this "king, may he remain seated cross-legged in the air, "and not fall, when he is thrown up." I take it that the litigant, being none too sure of his facts, would not risk the test lest his wife's red dress should turn some other colour in all men's sight.

The only thing at all like this I can remember from my own field is the famous oath of Achilles in *Iliad*, i, 233 foll.
"I will tell thee plain," he says, "and will swear a

great oath thereto; even by this staff, which shall never more put forth leaves and twigs, having once left its stump in the hills, nor grow green again, since the bronze (tool) has stripped it of leaves and bark, that now the sons of the Achaioi bear it in their hands, the doomsters who guard the customs sent from Zous; and this shall be a great oath unto thee: verily a longing for Achilles shall come upon the sons of the "Achaioi, one and all, and in that day thou will not be
able to help them, though never so grieved, when
many fall and die before Hektor the man-slayer." There is no other passage like this in all Homer; the commentators quote one or two in which the taker of an oath holds a staff or sceptre in his hand, but in these a god is mentioned by name, with some regular formula such as ἴστω νυν Ζεύς, "may Zeus be my witness! But Achilles' formula is not properly an oath, since it invokes no god and also does not hint at a conditional curse on anyone if the statement is false; it means simply, "As truly as this dry staff shall nover blossom, so truly shall the Achaioi repent of having quarrelled " with me." One is reminded a little of the Pope's staff in Tannhäuser. Possibly Homer's remote ancestors certainly not Homer himself, nor Achilles as Homer conceived him-might have expected that, if Achilles' threat did not come true, the staff would clothe itself once more mit frischem Grün.

Superficially like Acts of Truth are those instances in which a god is appealed to by the memory of some past event to intervene in a petitioner's favour. "If the dear "gifts of Love gave thee any joy, Poseidon," says Pelops in Pindar, "stay, I pray thee, the bronze-tipped "spear of Oinomaos; bring me to Elis upon the swiftest of cars and wed me to victory." "Vesta, guardian of Rome," the Vestal Aemilia cries, "if I have per-" formed thy worship in holiness and righteousness for nearly thirty years, in purity of soul and cleanness of body, manifest thyself unto me and help me, and let not thine own priestess die a most grievous death; but if there is anything unholy wrought by me, then by my punishment do thou away with the curse upon the city." And at her prayer, the cold ashes of the neglected fire were revived by the power of the goddess and set light to a strip of her linen robe which she threw upon them. So Claudia, accused of unchastity, cried to the Great Mother to vindicate her, and in answer, the ship, in which the holy stone from Pessinus was, followed her touch upon its cable, when no power of men could move it. But the resemblance is superficial only; the god is appealed to for the direct benefit of the worshipper, not to confirm a statement merely, and the prayer is strongly charged with emotion. It is like the well-known petition of the Litany, "Save us and deliver us for thine honour.'

As to ordeals, they certainly existed here and there in antiquity, the most famous example being in Sophokles Antigone, 264-5, which mentions the tests by red-hot iron and by fire; more examples will be found in Jebb's note there, mixed with some that are not in point; a few others in the article Ordeal (Greek), in Hastings, E.R.E., and much discussion of the custom in Glotz' well-known work L'Ordalie. But they were not important, and in any case the custom is so widespread as not to need long discussion here.

The ordinary oath-formula in Greek and Roman antiquity was a conditional curse: "if this statement is "true (if I keep this promise), may all good befall me; if "not, may all manner of (or some specific) ill." It

might be and often was made more efficacious by laying the hand upon some holy thing, such as the sacrificial flesh on the altar, or holding some object very full indeed of mana, as the ancient stone implement which was Iuppiter Lapis at Rome. In the latter case, pantomime might assist the spoken word, much as in the Chinese oath by the saucer. These ceremonials are familiar, and quite unlike an Act of Truth. H. J. ROSE.

Physical Paternity in the Morehead District, Papua.

SIR,-If the ignorance of physical paternity is still under discussion, you may find space for this rather belated note. I do not propose to enter the lists so far as the Trobriands are concerned, for I have no first-hand knowledge of that district; but the beliefs of the Morehead River natives (at the opposite end of Papua) are worth giving as relevant to the question in general. I refer especially to the Keraki people, who occupy the country between the Morehead and Wassi Kussa Rivers.

I have paid a number of visits to this district and on various occasions have made enquiries into the theory of conception held by the natives there. The answers were very straightforward, and indicated that they well knew that the father played his part in the procreation of the child. It was generally held that pregnancy resulted from repeated intercourse, and the actual body of the child was said to be formed by the accumulation

of jengers (semen).
This opinion was given with so much confidence that it is hardly necessary to substantiate it with further evidence. But it may be worth adding the following.

(I) Some natives, seeking to explain the barrenness of certain women, suggested that they were in the habit of ejecting the semen after intercourse. (2) It was also claimed that the woman's refusal to cohabit again until her last child was walking accounted for the smallness of families. (3) I have recorded a note taken from a childless and indignant husband: "I have 'em all the "time; which way I no get a picannin?" (4) The males of this district are without exception sodomists (sodomy is a custom, with ritual initiation), and they hold the belief that the practice may lead to pregnancy in the male. The rare cases of corpulency in men may be accounted for as due to pregnancy, and the youths who must submit themselves to their elders are given lime to eat with the express object of preventing it. Altogether, there remains not the slightest doubt in my mind that the natives of this district are well aware that the male semen plays an essential part in procreation.

Now, in Man, 1924, 44, Mr. A. P. Lyons, who was Resident Magistrate of the Western Division and knew his natives well, has a note on 'Paternity Beliefs and 'Customs in Western Papua.' It refers to the people living between the Morehead and Wassi Kussa rivers, i.c., to the Keraki, whom we are at present discussing. There is no need to quote at length from Mr. Lyons article : the gist of it is that the birumbir, the " animating principle in human beings," is "placed in the uterus by way of the vulva, and in the form of junga (semen), " by an eel-like creature called Tombabwir. physical act of coition "served to make the passage," but the actual impregnation took place while the woman was bathing or fishing, and thus within reach of the Tombabwir.

I was not unaware of what Mr. Lyons had written, but for a long time was quite unable to verify it. I visited many different tribes in the Morehead district, but all

Pindar, Olymp., i, 77 sqq.
 Dionysios of Halikarnassos, Antiquit., ii, 68, 4.

See Ovid, Fasti, iv, 291 sqq., for the best-written

account of this miracle.

⁴ I have briefly discussed this in Primitive Culture in Italy, pp. 45-6.

my enquiries on this subject were met by the sort of answers I have already given. The most I could get by way of verification was from a native of Pethekaka, a very knowledgeable man, who told me that the people living about Bebedeben (those from whom Mr. Lyons had his information) believed that women were entered by eels (dombakwer in my informant's dialect) while they were in the water, thus becoming pregnant; there was further a belief, a sort of practical hint to husbands, which I encountered more than once, that if they wanted a child it was wise to have connection with their wives actually in the water. Those who knew of this hint, however, were quite unable to offer any rationale.

During my last trip to the Morehead, in October of last year, when I worked exclusively among the natives of the Bebedeben neighbourhood, I determined to bring them to the point, if necessary by some judicious leading questions. For some time they appeared unable to see what I was driving at, but finally I succeeded in striking a responsive chord, and thereupon followed quite a free and easy revelation. I judged from the manner of my informants that they had not been hiding this belief (we were on very familiar terms and they had no reason to do so), but that they simply had not thought of it. At any rate, they showed no reluctance in talking about it

once they had got on the track.

The details of the theory as I got them are somewhat different from those of Mr. Lyons' version, but the essential point, viz., the agency of the eel, is the same. My informants explained that the eel will only approach a woman soon after intercourse, when the 'smell' is still upon her. Thus stimulated, it enters her vagina and itself copulates with her (the woman herself remaining in ignorance), and finally withdraws, leaving behind the greasy deposit such as a man finds on his hands after attempting to hold one of these creatures. My informants were quite explicit about the eel's methods, and insisted that it did not remain inside the woman. But, as is so often the case, there is evidently some confusion of thought. In the last stages of pregnancy, a man who knows the appropriate medicine and spell may be called in to assist. The medicine is a secret thing of which my informants could tell me nothing, but the spell was more or less common knowledge:

Tombabwir henute komu-degwar ragaraga.

grease neck-gills tail. This spell is breathed down the labouring woman's open throat, and it is said that the eel is being called upon to open and shut its gills and to wave its tail. It looks as if the eel were pictured as still inside the woman and identified with the baby about to be born. But my informants persisted that this was not the case. Maybe they are employing a sort of mental figure: the baby should slip down like an eel.

This remains, then, rather obscure and apparently inconsistent. But this obscurity and inconsistency need not concern us here. The point is that these natives, who have a practical knowledge of the elementary facts of physical paternity, at the same time entertain this other belief, that pregnancy is caused by the eel. (I could not verify Mr. Lyons' statement that "the "embryo is a spirit child," but that again is beside the present point.) They went so far—while on this track as to say that if the eel did not copulate (tovoneta) with a woman she could not conceive, though this was obviously at variance with the theory they had formerly propounded with so much confidence.

It may be noted that the eel theory was only found among the central tribe of the Keraki people, where the cel is treated as a totem; also that the knowledge of

the eel magic in child-birth belongs only to some members of the Bangu moiety. The belief is thus apparently isolated. But even where it is found, the other, rational, explanation exists side by side with it-or rather should we say, on top of it.

It may be that the cel theory represents an older interpretation of the phenomenon which has been almost entirely supplanted by the more enlightened rational explanation; but since the natives of the Morehead district have been so little influenced by Europeans it would be quite unjustifiable to regard the rational explanation as due to modern contact. At any rate, there is no doubt that, among the Morehead tribes, the one that has had the largest share of European contact is just this central tribe, about Bebedeben, where the cel theory is still extant.

In fine, I think we cannot escape the conclusion that these two theories (1) of impregnation by the eel, and (2) of impregnation by the male semen, exist together; and that the second is generally accepted and overlies the first; but that the native, despite the inconsistency of the two theories, can at different times express a sincere belief in each of them.

F. E. WILLIAMS. Govt. Anthropologist, Territory of Papua.

Jocasta's Crime.

MAN

SIR,-In the review of 'Jocasta's Crime' (Man, 1933, 71) the author is quoted as suggesting that the prohibition of re-marriage of an Orthodox priest is due to his once having obtained his priesthood through his wife. The review ascribes the prohibition rather to the early Christian dislike of remarriage by anyone. In all the Orthodox lands with which I am acquainted, and I believe the rule holds good for the Orthodox Church in general, the popa or orthodox priest has to be married before he takes holy orders. In the actual cases of men I knew, the marriages were arranged by the parents so soon as it was decided that the boy should become a priest. In one case I knew well-the man gave me the details-he was married when about fourteen to a girl of twelve and at once sent to Russia to a theological school. Here he decided to qualify for the higher orders which are selected solely from the celibate monks.

Returning to Montenegro after his training, refused to consummate the marriage. The bride's family was deeply offended, and a serious feud would have ensued had not the Metropolitan wisely annulled

the marriage.

A village priest I knew was son of a priest. He, too, was similarly married as a child previous to beginning his training. Once ordained no marriage is permissible. Hence no priest can re-marry. He marries as a layman.

As the popadija (popa's wife) often explained to me,

it is a great advantage to be married to a popa as he must treat you well and take care of you. Laymen do not care if you live or die because they can get two more wives if necessary. A fourth marriage is not permissible even to a layman.

A widower can become a monk and qualify for the

higher orders, igumen, archimandrite, etc.

The Grand Duchess Marie of Russia in a recently published book Things I Remember states that in Russia, as a rule, the youths who trained at the chief theological college were married to girls at the special school for priests' daughters. Thus a kind of priestly caste was formed. M. E. DURHAM.

CORRECTION

Man, 1933, 109, par. 2, line 3, for indices read 130

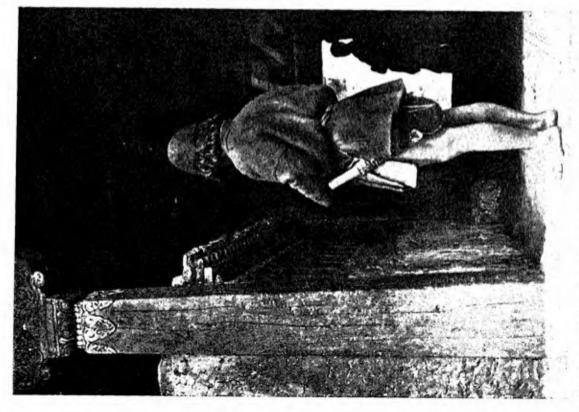


FIG. 2. DAKTA MAN OF THE 'TAILED FOLK,' SHOWING CAUDAL ATTACH.
MENT OR TAIL, STANDING IN THE ENTRY CORRIDOR TO TASHIGONG DJONG.

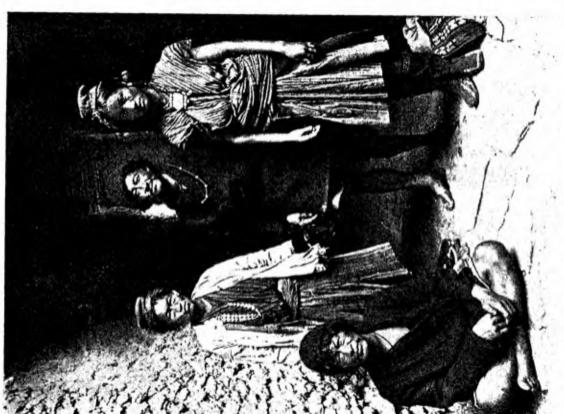


FIG. 1. GROUP OF TWO MEN AND TWO WOMEN OF THE DAKTAS, OR 'TAILED FOLK.'

DAKTAS OR 'TAILED PEOPLE,

Photographs by R. E. Cooper.

MAN

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ORIGINAL ARTICLES.

With Plate L.

Bhutan: Tailed People.

Cooper.

'Daktas'-People with a Tail in the East Bhutanese Himalaya. By R. E. Cooper.

Bhutan is an entirely mountainous area in the Himalayas, marching with Eastern Bengal and Assam on its south border, the Tibetan Provinces of U on the north border, and Monthuil (Mon Yul) on the east, while the Chumbi Valley limits its western determination. It lies between 27° N. and 28° N. and 89° 15′ E. and 91° 45′ E., and consists of south trending ranges from the main Himalayan chain, the Indo-Tibetan divide.

The Chumbi Valley is the first break in the main range and further east, in eastern Bhutan, the secondary ridges arising from more broken sections of the range begin to change direction from southward to south-west, their definite direction in the Dihang Valley further east. This change culminates in the longitudinal run of the ranges that form the gorges of the Salween, Mekong and Yangtse Kiang rivers.

The last ridge in Bhutan to pursue an unbroken trail southward springs from the Himalayas, a few miles east of the Kulu Kangri group of peaks on the main range, and is almost identical with the line of longitude 91° E. On it the rock outcrops have a much steeper angle of dip than elsewhere in the country, and the pass crossing it, the Rudong La, was considered hazardous.

One of the age-old routes between Tibet and India that traversed this part of the country from Lhasa in the north to the Hajo Hill, near the old capital town of Kamrup in Bengal in the south runs via the valley of the main river of east Bhutan, the Dangma Chu or Manas and that of its tributary the Tawang (Towang) Chu. Traders, conquerors, pilgrims and nomads have ventured from each country to the other from the earliest known times, and there is no doubt that circumstances deemed favourable at the time have determined the settling by the way of seceders from some of these incursions, so that the occurrence of groups of people foreign in their appearance, ways, speech, and dress to the general run of the inhabitants of these eastern valleys of Bhutan is not surprising.

"It would be impossible to classify or trace the origin of the many different types of people found in Bhutan without long and careful study, but I would point out that people from China, Ladakh, and Europe have found their way to Bhutan, as well as Khampas, Duphlas, and other nearer races. We came across two or three men who, in fairness and texture of skin and hair and in feature, were indistinguishable from English or Germans, while others were low animal-looking negroids; but among the better classes there certainly are three distinct types: first, one in which the men, like Sir Ugyen Wangchuk, have broad, pleasing faces, somewhat French in character; second, a Semitic type, with features resembling those of Cabulis; and a third type, in which the facial characteristics are oval and the features refined. A curious fact differentiates the Bhutanese from all their neighbours, viz., the hair on their faces. It may be noticed that the Dharma Raja is usually depicted with a long pointed beard, and many, like Sir Ugyen, wear moustaches."

This is all that J. Claude White, C.I.E., has to say on the ethnography of the inhabitants of Bhutan in *The Geographical Journal*, page 35, Vol. XXXV.

The Trig. Survey Map of India, sect. No. 46-S. '08, has the word *Chingmis* written down the line of 91° 30' over an area (part of Bhutan) which includes the valley of a tributary of the Dangma Chu, and in which are the principal Djongs or castles of Tashigong or Benka and Tashiyangsi, while twenty miles due east of Tashiyangsi is the area called Tawang or Men Tawang. *Chingmi* may be interpreted as Tibetan for *Jungle* (wild) folk.

It is the consideration of certain features of dress of some of these people that this note proposes to treat.

Interestingly enough this area, as well as that part of Bhutan west of it to the Rudong La

ridge, has certain botanical and geological features different from the rest of the country.

"Of the people of the east who live beyond the Pele-la the bulk of the population is not of Tibetan origin, nor do they speak Tibetan. I give a few words they use, spelt phonetically, which seem to me different to those of Tibetan derivation. Gami = fire, Nut = barley, Mai = bouse, "Tyu = milk, Yak = barley, Mai = bouse, "Tyu = milk, Yak = barley, Mai = bouse, but they are allied to the people of the Assam Valley and to those living in the hills to the east beyond Bhutan. They are of a different type to those in the west, smaller in stature, the complexion is darker and features finer cut, and their dress is different. They also profess Buddhism, but are not so observant of its customs, nor are there so many monasteries and Lamas to be met with as in the other part of Bhutan. Sir Ugyen Wang-chuk estimates that there are about 200,000 of them." 1

While resting in Tashigong Djong (27° 20′ N., 91° 36′ E.) preparatory to visiting some hilly country to the south-east which ranged over an altitude of 13,000 feet, the writer in the course of conversation with the *Djongpen*, or local governor on local subjects of interest, noted the phrase *Tailed men* used by the latter. This subject of the conversation was startling and consequently pursued very diligently. It was ascertained that there were in an eastern valley of the Tawang district certain people who were said to have tails and that these tails had been and could be seen. It was further explained that these were not real fleshy appendages, but a feature of their dress, which, worn only by these particular people, had obtained for them the local name of *Tailed men*.

The members of this tribe, for so it seems necessary to call them, occasionally visited Tashigong where they were considered rough and uncouth, but the *Djongpen* agreed to persuade some of them to come in and await my inspection. A party of four, two men and two women, who were seen and photographed, were said to be unrelated by blood although indulgence in the Tibetan custom stated at the end of the fourteenth law of the Bhutanese code as a free crime (!) may be presumed.

They were from five to five foot six inches in height, well built and sturdy with good calves; the youngest woman of the party appears taller because of the thickness of the soles of her Tibetan felt-lined boots and her quaint headgear. They were said to be herds-folk, a fact which is perhaps borne out by the fineness of the fingers and toes. In features they differ from the Bhutanese in that the face tends to be less flat, the nose having a heavier bridge, so making the whole of the nose more prominent and bringing the tip a trifle down and thus giving a slight Armenoid cast to the countenance, in contrast to the Bhutanese, whose faces have little bridge so that the nose tends to become broader and the tip a trifle retroussé. The width of the base of the nose is less in the Tailed men than in the Bhutanese.

The men's main outer garment consisted of a knee-length coarse, woollen, woven, cloth smock (or baku), lifted and girdled at the waist with a thong, to form a pouch used as a pocket, while the cuff was not turned back, the only feature in which the men's clothes of the two peoples, Bhutanese and Daktas, differ.

The men's hats are distinctive in that they differ from the *Chingbu*, or Lepcha, a pork-pie hat commonly worn by the Tibetans, which is made of cloth. The hats of the Daktas consisted of a hemispherical, pudding-bowl shape of coarse felt of yak or goat's hair nearly an inch in thickness and large enough to slide easily on an average round head. The hat has no brim, but there are on

the edge five tapering points twisted out from the body of the felt to a length of two inches and the thickness of a finger. There is a thin chin-string of woven hair. The hat is worn with one tip projecting above over the nose so that, of the remaining four tips, two project over the chest and two over the shoulders to the rear. Since a feature of the leaves of many plants commonly found in forests in regions of heavy rainfall is a prolongation of the apex of the leaf into what is called a 'drip-tip,' and is assumed to accelerate the removal from the leaf surface of excessive water which would be a hindrance to transpiration, this seemed to offer an explanation of these points on the

edge of the hat. It was therefore suggested to the Daktas that the points on the edge of the hat were so placed and the hat worn in such a way as to throw off rainwater with the minimum discomfort to the wearer. In admitting that this was so these people asked how this feature was understood. The Bhutanese have no headgear in contrast with the local Tibetans and Sikkimese.

The main garment of the women consisted of a kneelength smock made of two straight pieces of cloth sewn together running the entire length from the back hem over the shoulders to the front hem and joined down the sides. Apertures are left for the head and arms and an extra piece is inserted in front from the waist to the hem to give fullness for walking. This garment is girdled

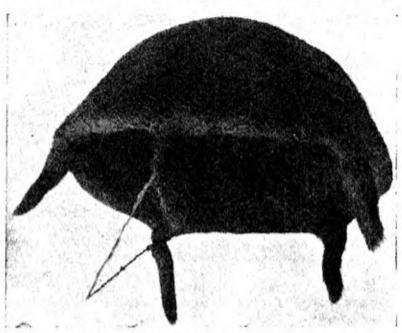


Fig. 3. Drif-tip hat worn by daktas.

Photograph by R. E. Cooper.

at the waist but not noticeably pouched, and the ends of the woven-cotton braid girdle are left flying. There is an essential difference between this garment and that of the Bhutanese women, which consists of two main cloths roughly eight feet long and four-and-a-half feet wide. Each is doubled end to end and wrapped about the body, passing beneath one arm, while the two top corners are fastened above the opposite shoulder. Each cloth consists of three narrow strips joined together, and coloured threads are incorporated in the weave in such a fashion as to give each piece a definite position in the decorative scheme of the whole cloth when the strips are united. The two strips, each reversing the position of the other, form a garment which has the effect of a sleeveless tubular dress. The top is fastened over the shoulders by large silver pins. A loose coatee made of a fine cotton cloth is worn by both Daktas and Bhutanese, and the material of the main garment is a coarser cotton weave with stripes sometimes woven in.

The men alone wore the article which is the unique feature of these people. This was the 'tail' worn at the rear and suspended from the waist, reaching almost to the back of the knees, but whether carried next the skin or worn between an outer and inner smock was not ascertained. This appendage or 'tail' consisted of a flat, round pad nine inches in diameter, made of either yak or goat hair. The wearers said that the pad was put on in their youth and was never removed. It was said to be used as a resting pad when loads were carried, but was never seen in use.

The women's hats were of a dark cloth, plain blue or striped brown and red, with a small brim two inches wide stiffened with stitching and a tassel of strings. The crown appears to be made of a

round top-piece as big as the inner circle of the brim with an upright strip two to three inches high, connecting it with the brim, the outside diameter of which is about five inches. Their use is merely a vanity tribute as they cannot possibly be of any service in rainy weather; obviously a dainty showerproof of a dryish clime rather than a weatherproof that a climate of rainstorms would make an essential dress feature.

The Tibetan boots of beautiful workmanship were probably obtained by barter.

The hair of the men is cut to chin length at the back and to a fringe half-way down the forehead. The women part their hair in the middle, draw it down the sides of the head and back to the nape of the neck, and make a loose plait or queue which is augmented after the Tibetan fashion with woollen threads and tassels. The queue is often coiled up and tucked under the hat. The hair of these people is black and straight.

The hair of the average Bhutanese is also black and quite straight, and there is no form of hair dressing apart from cleaning in either sex, the head being shaved all over about every second

month.

The chin of the Daktas is good and the mouth full-lipped with a humorous twist, not the least belied when, the photography finished, the younger man paraded round the courtyard making philandrous offers to any woman whom he fancied. The Bhutanese stood by horrified, their best inclinations of hospitality, which had been strained by the demands of this gentleman during the previous twenty-four hours, for the party had waited for my return from a small expedition, outraged, while his own party stood by grinning and enjoying this display of good Rabelaisean morals.

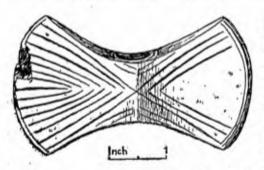
Neither of the four Daktas, nor the local Bhutanese, seemed to know anything concerning the origin of the peculiar 'tail' or any tradition connected with it, and inquiries from museums of Britain have been equally fruitless, but recently there has appeared a note that holds a possibility of a clue. Chungshee Hsien Liu in The Dog Ancestor Story of the Aboriginal Tribes of Southern China (Journ. R.A.I., Vol. LXII, 1932), gives many interesting remarks concerning the Southern Barbarians (page 361), their movements and present-day equivalents while in The Story (page 362), appears the sentence, "The fashion and cut of the clothes always left a tail at the end," and among Ethnological Considerations (page 366) is a quotation from the Annals of the Ts'in Dynasty which offers much that may help to link up this 'caudiform ornament' with those already known.

R. E. COOPER.

Ireland. Gógan.

A Perforated Double-Axe of Stone from County Mayo. By L. S. Gógan, Deputy-Keeper of Irish Antiquities, National Museum, Dublin.

The axe figured in the accompanying illustration was found recently at Curraboy Knox, near Ballinrobe, County Mayo, and is now in the National Museum at Dublin.



The precise find-spot is the N.E. angle of a triangular field adjoining the village byeway, on the land of Mr. Edward O'Toole, the finder. The axe lay at a depth of one foot in yellow clay, thought to be lacustrine in origin. In fact the area is on the verge of a tract still liable to flood and but recently reclaimed. It is known as Lough Killosheheen (Loch Cille Ó Seighin, or the like). Curraboy, i.e., Corrach Buidhe, the Yellow Marsh, itself describes the character of the terrain. What appears to have been a hearth-site was discovered some 20 yards away. 100 yards to the South are remains of a lake-dwelling. There is, however, no

evidence for connecting either site with the find. The data of discovery were supplied by Professor Goulden, of Kilkenny College, through whom the axe was acquired.

This object is probably unique and furnishes a useful additional document for the study of the

perforated stone tool1 as well as for that of the double-axe cult. From the various points of view of form, decoration and technique this small object is in its own way something of a masterpiece. In outline it is a double-axe and little doubt can exist as to the intentional reproduction of this form. The treatment of both edges is not the least singular of its characteristics. There is nothing like a cutting edge in question at all, but one of the bevels is more acute than the other. 'edge' is about an eighth of an inch thick and is decorated with incised border lines which form part of the ornament of the faces; the back 'edge' is about twice as thick and is rounded off and decorated also, but with a larger number of grooves drawn parallel to the curve of the 'edge.' The thickness of the edges and the decoration applied to them definitely rule out the possibility of the axe being intended for practical everyday use and indicate that primarily it was intended for some higher purpose, perhaps a votive offering,2 insignia or sacrificial weapon. It may be stated here that little in the circumstances surrounding the find helps us in that direction, and the finder was able to explain the traces of a substance resembling other, small particles of which I found adhering to the axe, as due to the spilling of a packet of raddle! If unexplained this assocation would have proved a stumbling block in view of the contemporary character of these two well-known cults, ochre burial and the perforate stone axe, both traceable to Russia.

That our axe was not altogether a passivist creation is indicated by the spall which has been taken off the cutting edge, a fact which indicates its utilization possibly as a weapon. The fracture is unquestionably ancient, though whether as ancient as the period of manufacture or not we have no means of deciding. Like the pitting which occurs on this edge also it was caused by contact with

some hard material, the spall being removed by a glancing stroke.

Returning to the ornamentation, it will be noticed that the basis is a large depressed X, having the terminals joined (or almost so) by the arcuate lines which decorate the edges.³ The triangle or secant corresponding to the 'cutting edge' is completely filled in with lines radiating from the apex, the corresponding one only partially so; the external angles are similarly treated. Both sides are treated uniformly. The other surfaces do not escape treatment, each being decorated with a double border line which does not appear in the figure; on the other hand, the perforations are not treated equally; what we may now regard as the upper opening is decorated also by a double border line while the under opening is left plain. All this shows an extraordinary finesse and deliberation quite unexpected, and, as far as I know, not shared by any other object of this class. It is all the more surprising in view of the hardness of the stone, which is a felsite porphyry, and yet the lines are applied with a casualness which betokens not only a practised hand but an efficient tool. The technique immediately recalls the geometrical patterns and border lines with which that characteristic Irish ornament, the gold lunula, is decorated, and this association of facts is strengthened by a comparison with decorated bronze axes of advanced flat type: some of these are decorated with broad flat grooves, which radiate to the bevel as in the present instance; however, when the linear technique is employed for decorating bronze axes, it is generally used for making geometrical figures.

The actual origin of the decoration as such is clear enough. I can, however, only briefly indicate it here. Central European, Prussian and Russian perforated stone-axe types show decoration mainly consisting of vertical lines, from the top of each of which an oblique line is drawn to meet the base of the next. In addition curved lines are incised to emphasize the edge and other structural features.

⁴ Irish Stone Pendants, J. Cork Historical and Archwological Society, 1931.

² This aspect is notably developed in Crete and Brittany. An interesting addition are the Guernsey perforated stone picks, found under conditions which warrant this interpretation; see 'Archæology of the 'Channel Islands," by T. D. Kendrick.

³ This figure is in itself a depiction of a double-axe for which analogies might be cited. The triangles and double-triangles of Irish sculpture are frequently interpreted by Breton analogies as representations of

axes.

¹ Smith, Reginald A.: 'Perforated Axe-hammers of Britain,' Archæologia, LXXV, p. 83. Jones, S. J.: 'The Typology and Distribution of Perforated Stone 'Axes in Europe and South-West Asia,' Studies in Regional Consciousness, Oxford University Press, 1930. Åberg, Nils: 'Die Typologie der nordischen Streitäxte,' Mannus Bibliothek, No. 17, 1918. Chitty, Lily F.: 'The Perforated Stone Axe-hammers of 'Shropshire,' Bulletin of the Board of Celtic Studies, IV, p. 1. Gógan, L. S.: 'A Perforated Stone Pickaxe 'from North East Louth: its position in Irish Archæology,' J. Co. Louth Archæological Society, VI, p. 1.

The former is the dominating and key motive, the latter essentially a refinement. We can trace it also in Crete. Evans (Palace of Minos, ii., p. 619) figures a double-axe depicted on an intaglio found under a L.M. 1, a floor in which this motive as well as the refinement occurs. Both are also represented in a bronze from Mycenae (Hoernes: Urgeschichte, 1925, p. 385). The key motive is obviously derived from a binding technique, actual or related examples of which are known from Egypt (Petrie: Tools and Weapons). In a lecture on the Copper-Bronze transition given recently in Belfast I drew attention to the comparative frequency with which groups of two copper axes have been found in Ireland and I suggested as a likely explanation that these may have been mounted together on a single shaft after the manner of a double-axe. Some of the large Cretan axes which are essentially bipartite in construction encourage this notion. Either, then, the decoration of the Mayo double-axe represents a stylization of the European motive, or a modification thereof under the influence of a native binding technique.

Although quite new to the class of perforate stone types in Ireland, there seems to be no special reason for regarding it as an importation. There is an outcrop of felsite porphyry on the N.W. side of Lough Mask in the immediate region in which the axe was discovered and, as we have seen, close parallels for both the technique and style of decoration exist in Ireland already. However, as the general form is rather more characteristic of the homeland of the type than of Ireland, it may be useful to recall that perforated double axes, both in stone and metal, occur in Yorkshire.⁴

I may add that the perforation is not absolutely cylindrical, there is a very slight curved narrowing towards the centre, something intermediate between the biconic and cylindrical types of perforation.

L. S. GÓGAN.

International Congress of Anthropological and Ethnological Sciences. Meeting of the British Organizing Committee, 4 July, 1933.

133 Preparations for the London meeting of the International Congress were inaugurated by the meeting of the British Organizing Committee, held in the rooms of the Society of Antiquaries at Burlington House, on Tuesday, 4 July; the President of the Royal Anthropological Institute. Rev. Edwin W. Smith, in the chair.

Professor J. L. Myres gave an account of the origin and constitution of the Congress, which is designed to include all those departments of research which contribute to the scientific study of Man, in their application to races, peoples and modes of life. It results from more than twenty years of preparation. In 1912, after the London Session of the International Congress of Americanists, the Royal Anthropological Institute invited a small committee, on which eight countries were represented (Man, 1912, 103), to organize a more general assembly, which should discuss questions of anthropology and ethnology in the years when the Americanist Congress met in Europe. The proposal was communicated to the International Congress of Anthropology and Prehistoric Archæology, which met in 1912 at Geneva, and was favourably received. In 1916, that Congress was to have met at Madrid and the Americanist Congress in Europe, and a 'Congress of Anthropological Sciences' was, therefore, planned for that year; but these meetings were prevented by the War. In 1931, however, a new International Congress of Prehistoric and Protohistoric Sciences was founded by a conference at Berne (Man, 1931, 137); it held its first session in London in 1932 (Man, 1932, 240), and has been invited to meet at Oslo in 1936.

To provide similar facilities for the whole range of anthropological and ethnological sciences, the Royal Anthropological Institute, with the concurrence of the survivors of the committee of 1912, and after prolonged inquiries, convened a conference at Basel on April 20-22, 1933 (Man, 1933, 84), at which it was unanimously agreed by the representatives of nine nations, with the written encouragement of distinguished colleagues in all parts of the world, to establish an International Congress of Anthropological and Ethnological Sciences, on similar principles, and to accept a British invitation to hold the first session in London in 1934. Subsequent sessions are to be at intervals of four years. The new Congress should thus always meet at two years' interval between Prehistoric Congresses,

and always in those years when the Americanist Congress meets in Europe; for example, at Seville in 1934.

The Congress is governed by a Permanent Council, consisting of not more than four members from each country, assisted by one or two 'national secretaries.' The first members were nominated at the conference at Basel; vacancies will be filled by the Congress, on the nomination of the Council.

Dr. A. C. Haddon, F.R.S., proposed that an invitation circular, prepared in conformity with this

statement, be adopted and issued forthwith. This was agreed unanimously.

On behalf of the British members of the Permanent Council of the Congress the chairman proposed the following as officers of the Congress, and they were elected unanimously: Chairman of Executive Committee, Captain T. A. Joyce; Honorary Treasurer, Mr. H. G. Beasley; Honorary Secretaries, Professor J. L. Myres, Mr. Alan H. Brodrick; Honorary Assistant Secretary, Mr. Adrian Digby.

Captain T. A. Joyce, Ex-President of the Institute, summarized recent correspondence in regard

to the Presidency of the Congress. It was agreed to ask the officers to deal with this matter.

Professor Myres proposed, and it was unanimously agreed, to invite the following to be Vice-Presidents of the Congress:—The Lord Mayor of London, the Duke of Abercorn, the Marquess of Zetland, the Earl of Onslow, Lord Lugard, Field-Marshal Sir W. Birdwood, Master of Peterhouse, Cambridge, the High Commissioners for India, Canada, Australia, South Africa and New Zealand, the Provost of University College, London, the Director of the British Museum, the Presidents of the Royal Anthropological Institute, Society of Antiquaries of London, Royal Asiatic, Royal Geographical and Folklore Societies, the President of the Anthropological Section of the British Association, Sir Henry Wellcome, Sir Flinders Petrie, Sir Arthur Keith, Sir Denison Ross.

It was also agreed that the Executive Committee should consist of the Officers of the Congress, the British Members of the Permanent Council, the British National Secretaries, the President of the Royal Anthropological Institute, the Curator of the Wellcome Historical Medical Museum, and

the Chairmen (or in their absence the Secretaries) of the Sections.

The following Sections of the Congress were established, and Chairmen were invited to act:-

Anatomy and Physical Anthropology
Psychology
Psychology
Psychology
Prof. G. Elliot Smith, F.R.S.
Mr. F. C. Bartlett.
Prof. C. B. Fawcett.
Dr. A. C. Haddon, F.R.S.

Ethnography Dr. A. C. Haddon, F.R.S.
Technology (Arts and Crafts) ... Mr. Henry Balfour, F.R.S.
Sociology Prof. C. G. Seligman, F.R.S.

Sociology Prof. C. G. Seligman, F.R.S.
Religions Sir James G. Frazer, O.M., F.B.A.¹

Languages Prof. B. Malinowski.1

It was agreed that the formal sessions of the Congress should be held from 30 July to 4 August, 1934, followed by visits to provincial museums and other places of interest.

The accommodation provisionally agreed with University College, London, and with the Wellcome Historical Medical Museum (represented at the meeting by Dr. L. W. G. Malcolm, Curator),

was gratefully accepted.

The Treasurer presented provisional estimates of expenditure, and announced that guarantees had been already premised as follows:—The Royal Anthropological Institute, £100; Sir Henry Wellcome, £100; Mr. H. G. Beasley, £100; the Society of Antiquaries, Royal Geographical Society, Egypt Exploration Society, Japan Society, Sociological Institute, Central Asian Society, International Institute for African Languages and Cultures, Eugenics Society, British Association, Royal Asiatic Society, London School of Economics, the Universities of Birmingham and Liverpool, each £10; the Palestine Exploration Fund and the British School of Archæology in Jerusalem, each £5.

Mr. S. Gaselee, on behalf of the Foreign Office, undertook that the formal invitations to foreign Governments should be forwarded officially through His Majesty's Representatives abroad. He hoped that the Congress might be officially received on behalf of His Majesty's Government.

Mr. A. Bevir, on behalf of the Colonial Office, offered to forward official invitations to the Governors of British possessions overseas.

¹ The above have been unable to act, and are replaced by Rev. Dr. E. O. James and Dr. Alan H. Gardiner.

Regret for inability to attend the meeting was expressed on behalf of Sir E. A. Gait, K.C.S.I., representing the India Office.

Sir Percy M. Sykes, on behalf of the Central Asian Society, offered a public lecture as a contribu-

tion to the programme of the Congress.

The Chairman expressed the thanks of the meeting to the Society of Antiquaries for the use of

their meeting room.

The first invitation circular of the Congress will be issued forthwith. The Secretaries will be glad to receive the names and addresses of all who wish to receive circulars and to be kept informed of the arrangements. The Executive Committee welcomes suggestions for the conduct of the meeting, communications for the sectional programme, and contributions to the guarantee fund, on the adequacy of which the material preparations for the meeting necessarily depend. JOHN L. MYRES.

Cyprus: Archæology.

Ploughing in Cyprus in the Early Bronze Age. By P. Dikaios, Curator of the Cyprus Museum, Nicosia.

134 The excavations in the Early Bronze Age necropolis of Vounous-Bellapais, on the North coast of Cyprus¹ have yielded, besides the important finds which revealed the Early Bronze Age cults in Cyprus, some very interesting finds giving us an insight into country life and agriculture of those times. Thus the discovery of a miniature representation in pottery of a 'ploughing scene' is one of the most important in this line (Figs. 1 and 2). This is composed of a table-shaped object standing on five legs and representing a field. On the table two pairs of oxen, each followed by a man, are seen ploughing. On the left of the oxen are two figures each holding one end of a cradle in which a baby is lying. Not far from the two figures swinging the cradle is standing an animal, on whose back traces of a saddle-bag are still to be seen, followed by another smaller figure.

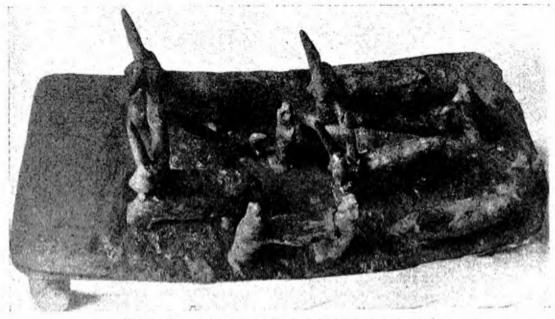


Fig. 1. MINIATURE REPRESENTATION OF 'PLOUGHING-SCENE.' Length 17 inches; Width 8 inches.

The interpretation of this scene is quite evident: the whole family of a farmer is out in the field, and while the men are ploughing, the women are swinging the baby to make it go to sleep, while their

¹ See Illustrated London News, 31st October and 5th December, 1931. Man, 1932, 249 (p. 213a).

Aung.

donkey (?), followed by a boy, carries their food or the seed to be sown in the field which is being ploughed. This scene is very natural and recalls present-day life in Cyprus.

But the great interest which lies in this object is that of the discovery of the type of plough used



SAME AS FIG. 1, SIDE VIEW.

during the Early Bronze Age period, i.e., from 3000 to 2100 B.C. This is very simple and recalls the Hesiodic plough and the one used in our own times in Cyprus. It is composed of a yoke, a beam, a handle and a share, which in our scene seems to be half buried into the soil. This must have been made of wood, but we do not know what the share was made of; I think of bronze as we are in a period during which bronze was largely used for the making of tools and implements. P. DIKAIOS.

Burma: Tug-of-war.

By Maung Htin Aung.

Burmese Rain-making Customs. In Upper Burma, especially in the 'Dry Zone,' where scarcity of rain has always been a grave problem in the life of the people, rain-making ceremonies are resorted to when, although according to the calendar the rainy season has begun in actual fact, the weather remains mercilessly dry.

Tug-of-war is a popular game with both grown-ups and children alike, male and female, at any time of the year, but it is specially popular at the beginning of the monsoon season, for then the game is supposed to bring rain. However, the actual ceremony of the tug-of-war is resorted to only when the monsoon winds are very late. Then the whole village will assemble one afternoon. Ropes are brought and twisted and tied together to form a single stout rope, which stretches right along the main street of the village. Referees are appointed, and all able-bodied villagers are divided into two teams, the Southern and Northern, according to the half of the village to which the participants belong. Then they tug at the rope, while the non-participants stand by and cheer. Rain will fall, no matter which side wins. But the fall will be immediate and abundant if the Southern team is victorious. One wonders if this belief has anything to do with the fact that the monsoon winds come from the south. When the game is over, all jump about and cheer and dance and sing.

made of bamboo and paper, and painted, is carried in procession round the village, with music and song and dance. After stopping at a pagoda or monastery to say prayers, the procession proceeds to a stream or river, where the huge fish is sent floating down-stream. The ceremony is supposed to represent a 'Jataka' story, in which the self-sacrifice of a king of the fishes (who was later to be the Buddha) is narrated, but in actual fact it is difficult to see the connection, for that particular Birth-Story does not mention rain or drought at all. The ceremony illustrates how pre-Buddhist and non-Buddhist customs were later given a Buddhistic setting.

There is also a belief that a period of prolonged drought is brought about by the villagers' bad conduct and neglect of religion, and that rain will fall if they do meritorious deeds. But this is only an application to a particular case of the Buddhist doctrine that bad or good consequences follow sinful or meritorious conduct. And during the time of the Burmese kings, if large areas of the country were suffering through drought, the sovereign retired to a monastery to pass seven days in prayer and meditation, for the cause of the drought was attributed to his neglect of the 'Ten Moral Rules of

'Royal Conduct' which all Burmese kings were bound by custom to obey.

Although there exist witches, witch-masters, magicians, and alchemists, they never claim to have the power of producing rain, and although offerings are often made to spirit-guardians of wells, lakes, streams, weirs, and canals when using their water, the help of 'nat'-spirits is never sought in order to bring about a fall of rain.

MAUNG HTIN AUNG.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Polynesian Voyages. Summary of a Communication presented by Professor P. Buck, M.D., D.S.O. (Te Rangi Hiroa), 4 July, 1933.

The Polynesian people, proud of their chiefly lines of descent, have preserved long genealogical tables which, with a rich traditional history, have been handed down orally from generation to generation. The genealogies cover three periods; settlement on particular islands, pre-settlement voyages in the Pacific, and myth. The family pedigrees dating from an immigrant ancestor and covering from 22 to 26 generations are fairly reliable as oral records and may even be extended to 30 generations. The migrational period extending beyond this is confused and contradictory. Its use as a chronological basis for dating historical events must be treated with care and reservation. The mythical part must be recognized as such, but does not invalidate the value of the settlement part of the tables. Tradition contains much valuable historical data, but must be carefully weighed. The fact that past events have been brought forward and localized in various islands, while cultural elements developed locally have been projected backwards in time and space, does not entirely destroy the value of traditional history. Chronological dates based on genealogies and traditions must increase in error the further they go back in time. Interruptions by conquest and death, varying academic knowledge and ability, and the limitations of human memory, diminish the scientific value of orally transmitted genealogies and traditions as means of obtaining exact dates for the early movements of the Polynesians from Asia and Indonesia. The dates given by Smith and Fornander which are so generally accepted must be treated as an approximate sequence in time.

Two routes from Indonesia to Polynesia were possible: a southern Melanesian route and a northern Micronesian. The Melanesian route has been stressed by Rivers, who attributed Melanesian culture to the interaction on an aboriginal population of two successive waves of people which passed on into Polynesia. The northern route is indicated by the occurrence of Polynesian words in Micronesia. The presence of the sling in the two areas is significant. The sennit cap of the Gilberts occurs in similar form in the Society and Cook groups. The shape and the coiled technique are similar. Both

routes were evidently used.

Traditional narratives state that an early people were found in Hawaii, Cook Islands, and New Zealand by the later Polynesians who made long sea voyages from the eleventh to the fourteenth centuries approximately. The later voyages were made from the Society Group which was the cultural centre of Polynesia. The later immigrants conquered their predecessors, who were not exterminated but absorbed. Tahiti was occupied by an early people named the Manahune, which corresponds to the Menehune name of the early settlers of Hawaii. The Manahune were

conquered and absorbed by a later group from Raiatea. The traditional narratives of the early people have been overlaid by the traditions of their conquerors and have survived in unsatisfactory fragments.

The assumption that the early people reached such distant parts of Polynesia by accidental drift voyages is not convincing. In all cases, these people had their women with them and had increased to fairly large numbers. Women do not accompany the men on fishing expeditions in cances outside the reef. The cances must have been provisioned to reach such distant islands as Hawaii and New Zealand. Thus, the presence of food and women in cances denotes a purposive expedition. It may be assumed that owing to war and troubles in the eastern parts of Melanesia and Micronesia, small groups sailed out into the open sea to seek new homes which they felt must exist beyond the horizon. Winds and storms may have deflected them from a theoretical course, but they eventually reached land. Some groups may have been voyaging to a known island and been deflected by adverse winds as in the New Zealand account. The arrival of the early people in Polynesia may be regarded as the infiltration of small groups which trailed off at different times over probably a long period of time. Definite large migrations have no traditional support. The early people may be regarded as being of the mixed Polynesian stock with varying Melanesian and Micronesian admixtures. The presence of early Melanesian groups in Polynesia requires further analysis of available data.

The later long voyages centre around the Society Islands. From the tenth century onwards there was a period of adventure when such distant parts as Hawaii and New Zealand were re-discovered, reported back, and later occupied. The second spread of population as given in various traditions was attributed to over-population, trouble over food supplies, wars between different groups seeking power, and the desire of younger branches of chiefly families to establish their own authority in new lands. While it is assumed that the later groups were composed of new immigrants into Polynesia, it is possible that they were descended from the earlier wave and had developed a higher social organization in Raiatea. Thus, Tahitian tradition states that the Manahune were conquered by people from Raiatea,

but tradition is strangely silent about the earlier history of the Raiateans.

For the long voyages, expert craftsmen made large sea-going double canoes. The crews were specially selected for their strength and skill in using the deep-sea paddle, their bravery in war on land and storm at sea, and their endurance and self-control with regard to food and water. A priest skilled in observing weather signs and versed in star lore usually acted as navigator. The priests through successive generations had acquired a large amount of empirical knowledge. Unfortunately, the early Europeans who had the opportunity of obtaining valuable first-hand knowledge did not seem capable of eliciting it, with regard to sea-lore. Thus, one observer, after stating that the Hawaiians had a lunar calendar, goes on to say that it consisted of 12 months of 30 days each, making 360 in all, and to keep the seasons right 5 days were added at the end of the 12th month. The Hawaiians, like other Polynesians, counted the month by the nights of the moon, and had 30 names to distinguish the various stages of the moon. As each month was arbitrarily commenced by the appearance of the new moon on the western horizon, the 30 names were used when the moon had 30 nights. In Hawaii, when the new moon appeared on the 30th night after the previous new moon, the name of the 30th night and the 1st night were combined and the correction was made automatically. Similarly, the annual cycle commenced with the first new moon after a certain fixed position of the Pleiades. If the Pleiades was not in that position in the 12th month of the cycle, the Polynesians simply waited the extra month for the Pleiades to appear and commenced the new year with the following new moon. Thus, they automatically intercalated a 13th month, and by adopting a simple empirical rule they followed the Metonic cycle without knowing it. The above two examples are indications of how much valuable knowledge the Polynesians must have possessed.

A factor in the Polynesian voyages not sufficiently stressed was the courage and spirit of the leaders of expeditions. Traditions abound in poetic references to the strong personality of famous ancestors. The supreme confidence of the voyager Ru in himself is evidenced in his invocation to Tangaroa during a period of storm and clouded skies. Instead of beseeching Tangaroa to land him on an island, he asked that the clouds be cleared away in order that he might see the star by which he was steering. He could do the rest. Empirical knowledge of a high grade, craftsmanship in cance building, skill in navigation, invocations to placate adverse forces, and, above all, the spirit to do and dare, place the Polynesian voyages amongst the most startling achievements of a neolithic people.

REVIEWS.

SOCIOLOGY. Die

Menschliche Gesellschaft in ihren Ethno-Soziologischen Grundlagen. By Richard Thurnwald. Vol. I. Berlin-Leipzig (de Gruyter), 1931. 8vo. xxiv + 312 pp.; 12 plates.
 This first volume of Professor Thurnwald's general

treatise on human society contains what he describes as 'representative sketches' of the life of primitive peoples; and it is to be followed by separate volumes on the family, economic conditions, society and institutions, and law, systematically treated. The 'representative ' peoples are classified here as (i) 'exploiters of natural resources '(wildbeiter) on polarice, in steppe, desert and grassland, in forest, and in water-side fishercommunities; and (ii) 'cultivators' of plants and animals, with separate treatment of 'homogeneous' and 'disturbed' organizations, and the classified and stratified societies which emerge, with privileged groups of various kinds; and there are special discussions of the social consequences or concomitants of irrigation, the origin of domesticated animals (which is regarded as a special case of game conservation leading to exploitation of milk products and younglings) and the effects of the superposition of herdsmen on cultivators. Each type is represented by a single people, whose institutions and mode of life can therefore be presented in greater detail. For the accuracy and perspective of these descriptions Professor Thurnwald's distinguished contributions to ethnography are sufficient guarantee.

What gives this instalment especial value however is its introductory chapter, a philosophical retrospect of the whole course of ethnographical and ethnological studies, in relation to the general attitude of successive ages towards alien cultures, and to the gradual emergence of modern synthetic ethnology, and in particular of Professor Thurnwald's own outlook on his subject, explaining his classification and choice of examples, and biological rather than logical articulation of types and varieties, as expressions of the result of processes and, above all, of intercourse, and contamination resulting therefrom. From this point of view, the systematically contrived Kultur-kreise of other ethnologists are replaced by Kultur-querschnitte-cross-sections of historical processes at the moment when we are in a position so to study them. This treatment leaves the investigator free to consider the general problems of social change and variation separately and historically in the light of what may be described as 'longitudinal 'sections' in which ascertainable sequences may be set out in an 'order of progress'; and this will fill the next four volumes. Naturally, at its earlier end, such an ethnology is limited to human communities, and avoids both speculation about the habits of precursors, and description of those of actual primates. At its lower end, 'primitive' society merges in societies that are not primitive, when devices such as wheel and wagon, metal-working, script, statecraft, and jurisprudence supplement more primitive means of exploitation. Often, however, such auxiliaries, or some of them, become available before the old order has broken down as a whole. And there is the further difficulty that among the bewildering multiplicity of actual societies and the diverse functions which they subserve, there is often temptation to apply 'ideal' and even subjective criteria, to distinguish 'higher' types from 'lower,' and to lay undue stress on 'extreme' instances, which would be better described as 'exceptional.'

For this thoughtful study of the conditions of all ethnological work, and especially for the careful examination c the theoretical basis of Kulturkreisen and

'historical' methods, Professor Thurnwald deserves the hearty thanks of his readers. History is, after all, something quite different from typology. reveals valid resemblances among statical constructions, by discounting the differences which it deems insignificant. History, dealing with the course of events, which never repeats itself, discounts uniformities among geographical, economic, and ethnographic factors, in the search for those 'historic events,' of which each is a crisis and unique, the achievement of some human mind apprehending nature's facts afresh—momentum-que fuit mutatus Curio rerum. And such unique 'moments' are not rarities; they are happening to us all, like the little earthquakes which the geologist leaves to the seismographer. E pur si muove.

Primitive Secret Societies. A Study in Early By Hutton Webster, Ph.D. Second Edition, revised. New York (The Macmillan Company). 1932. Price 15s.

When 'Primitive Secret Societies' first appeared in 1908 it received an immediate and appreciative welcome from all grades of students, as it presented concisely and pleasantly the data then available and gave full references.

Professor Webster dealt with the discipline, training and ritual observances that characterize initiation into adult life. With increasing social progress, the powers of control are gradually shifted from the elders to the chiefs, and tribal societies charged with important political and judicial functions arise on the basis of the original puberty organizations. The functions of such societies and their decline are discussed. Fraternities of priests and shamans have frequently developed from tribal societies, and also from totemic clans. Dramatic and magical practices connected with primitive totemic groups survive in the ceremonies of the secret societies and even in the ritual of a solemn religious cult.

The new edition is page for page and word for word (except that translations have replaced the original quotations in a foreign language) a replica of the first edition, and, though it has not been brought up to date, it still remains a useful and suggestive survey of this very important and interesting subject. The serious student scarcely needs reminding that recent investigations and interpretations should be borne in mind when reading this book. A. C. HADDON.

An Introduction to the Sociology of Islam. By
139 Reuben Levy, M.A. Vol. I. 8½ × 5½, viii +
410 pp., 4 maps. London: Williams and
Norgate, Limited, 1931.

This work is being published for Herbert Spencer's

trustees as part of a series to be issued in continuation of his Descriptive Sociology, and the present instalment is the first of two volumes on the Sociology of Islam. It comprises an Introduction giving an account of the origin and history of Islam, with special reference to its expansion and the causes by which that was favoured, arrested or roversed. The first chapter deals with the grades of society and is followed by an appendix on slavery; the second with the status of women, the third with the status of the child, the fourth with Islamic jurisprudence, and the fifth with the Caliphate and the central government. Each of these sections is followed by a useful bibliography, and the volume concludes with an index. The book is extremely interesting and lucid; though it is learned, fully documented and to a great extent technical, it is nevertheless quite within the compass of the general reader, while at the same time

suitable as a basis for specialist study. The author has managed to compress a great deal of information into a limited space, and is careful to give his references where necessary.

In his first chapter he points out that "adequately " to estimate the part played by Islam in the com-" munities which adopted it would require an exact " investigation into the social conditions prevailing in each community before and after the introduction of " the new faith," which would have been a stupendous. not to say an impossible, undertaking. As a matter of fact, the unity of Islam, though probably greater and certainly more obvious than that of Christendom, is not quite as absolute as it seems on the surface to be. Apart from sectarian divisions of a purely religious character, there are many other divergencies. In theory, Islam as a system is much more comprehensive than Christianity, for it claims to dominate not merely doctrine, ritual and ethics, but pretty nearly every form of human activity. Yet even in the flourishing days of the Caliphate, as the author points out in his fifth chapter, a great many legal matters were decided not by the Islamic law, but by purely political laws and customs of alien origin. In our own time there are Muslim communities that still preserve pre-Islamic social systems, e.g., the matrilineal Menangkabau people of Sumatra and the Malay Peninsula, and a section of the Moplahs on the west coast of Southern India. On the other hand, European influences have in recent times tended to modify Islamic views and practices; but how far such modernizing tendencies may ultimately go is a matter on which it would be hazardous to speculate, nor does it fall within the purview of this work,

There are a number of points in the book on which mment may be made. While it is broadly true that comment may be made. the Arabic script is generally used by Muslims for writing their several languages (p. 6), this does not apply to Indonesia, where the old Indian alphabet continues to be used by the majority (especially in Java), and only Malay, Achinese, Sulu and a few other languages employ the Arabic one. It seems hardly correct to say that these use the Indo-Persian form of it, for Malay handwriting is not based as the Persian ta'liq or nesta'liq, but as naskhī (a rather crude specimen of which is represented by the oldest known Muslim inscription in Malay, of the fourteenth century, in 'J. Malayan Branch R.A.S. (1924), Vol. II, Pt. III); and while it has the non-Arabic letters cha and ga in common with Persian, its pa is formed not from ba (as in Persian) but from fa. Moreformed not from ba (as in Persian) but from fa. over the Indonesian Muslims follow the school of Shafi'i, like those of the coasts of Southern India and Southern Arabia. Sumuţra (p. 61) was not in A.D. 1346 the capital of Sumatra, for that island was not a political unit at all in the fourteenth century. Kansu (p. 62) is an unfortunate and misleading spelling for (I presume) Ibn Khordadhbeh's Qānṣū. The real Kansu is an inland

province of China mentioned on pp. 63-4.

The Mandingo (p. 70) are not Bantu, at any rate not linguistically. On p. 107 there seems to be some confusion, as Abū Lahab is represented as both making a proposal and agreeing to it. On p. 112 it is not clear where the quotation from Baydawi is supposed to end, No Javanese slaves could come from the pagan region of Celebes, Borneo, or the island of Nias (pp. 121-2). The original has 'Djāwah,' which means Indonesians in general. (J. H. Monahan's translation (1931), p. 13, is nearer to the truth though he restricts the meaning to Dutch subjects.) Dutch subjects.) Slavery has been illegal in Singapore for the past 110 years; and in view of that fact the statement (p. 126) that "in Singapore, in 1891, there " was a regular trade in Chinese slaves . . . and official
" protection was given to the trade," is a gross libel

which the author would find it difficult to justify. I do not doubt that, in spite of official vigilance, cases of such trading did in fact occur; but that is quite another thing. The case of the island of Cucub (better, Kukub), mentioned on the same page, stands on a different footing. It is not part of the Straits Settlements at all, but of a Malay State, with the internal affairs of which the Government of the Straits Settlements had no direct concern. On the same page the footnote reference 'pp. 11 ff.' should be 'pp. 276 ff.' On p. 142 the quotation from Koran 53 is garbled; the words 'male' and 'female' should exchange places. On p. 168 there is an obvious omission of 'no' before the word 'doubt' in 1. 14. In footnotes 1 and 2 of p. 223 the two Arabic words should exchange places. On p. 316 the word 'not' has presumably been omitted after 'though' in I. 20. It is difficult to see (p. 381, l. 14) how a judge can tell whether a claim is (or is not) justifiable, unless he hears it; some explanation should have been given here.

Among minor errors, 'to' seems to have dropped out at the end of l. 3 of p. 16; for 'affected' read 'effected' (p. 58, l. 11); for 'daugther' (p. 157, note 2), read 'daughter'; note 4 gives a reference to a non-existing note. The following discrepancies occur in spelling: 'Samarra' (p. 117), 'Sāmarra' (p. 348); 'Kababish' (p. 141, note 6, pp. 153, 208, 404), 'Kababīsh' (p. 141, 1. 19).

C. O. BLAGDEN.

RELIGION.

Early Beliefs and their Social Influence. Edward Westermarck. Pp. 182. London London: Macmillan, 1932. Price 7s. 6d.

This is a series of semi-popular lectures delivered at the School of Economics and Political Science in London and afterwards put together into book form. It is somewhat to be regretted that it goes so far in the direction of avoiding technical equipment as to give no references for the numerous quotations, merely directing the reader in a general way to the author's larger works, which are, of course, fully and well documented. The interest lies in the general conclusions reached, and these are, on the whole, not favourable to religion as a factor in the advancement of mankind. The moral influence of religion has often been greatly exaggerated. . . . It seems to me to be a fact beyond dispute that the moral consciousness has originated in emotions entirely different from that feeling of uncanniness and mystery which first led to the belief in supernatural beings. The old saying that religion was born of fear seems to hold true" (p. 23). "These "was born of fear seems to hold true" (p. 23). "These taboos" (on mentioning the name of God, or of some particular god) "have sprung from fear" (p. 104). These quotations may suffice to show the general tone. In the reviewer's opinion, they contain a double weakness: they confuse a factor, fear, which confessedly went to the making of that complex sentiment which we call religious emotion, with the sum of the factors; and they involve some very doubtful psychology in assuming that emotions only, and not an early use of the reason, lie behind religious and ethical beliefs at their inception. However, as the book is not on a scale admitting of elaborate argument for the author's position, a reviewer cannot devote over-much space to discussing it.

In dealing with the various aspects of religion as related to social custom and morality (respect for property, hospitality, family discipline, regard for truth, criminal law and regard for human life, duties towards gods, sexual relations and the position of women) Dr. Westermarck shows, as always, mastery of a vast amount of knowledge, much of it got at first-hand in Morocco. Many utterances on particular points are excellent, as the dictum that "slavery replaced " pauperism" in the ancient world (p. 41), and the warning against assuming similar rites always to spring from similar ideas (p. 136). The admirable good sense shown in the whole chapter on the position of women (pp. 152-172) is worthy of the author, and the acute discussion of the relations between religion and magic in the first

chapter should be carefully read.

Coming to a few small points, the statement that the Roman divi parentum were personified curses (p. 72) and the assumption, on the authority of Rohde, that the Erinyes were ghosts originally (p. 90) are equally uncer-Erinyes were ghosts originally (p. 90) are equally uncertain; that the divi parentum were ghosts and the Erinyes personified curses is at least as likely. To speak of "a "divine being called Wakanda" (p. 90) seems open to criticism from Americanists. "Professional days" (p. 98) is perhaps a misprint for 'processional.' That the Romans used to put "statues or images under the "foundations of their buildings" (p. 101), whether as a surrorate for a foundation segrifice or not, must surely a surrogate for a foundation-sacrifice or not, must surely H. J. ROSE. be a misunderstanding.

Essays on the Myth and Ritual of the Hebrews in relation to the Culture Pattern of the Ancient East. By A. M. Blackman, C. J. Gadd, F. J. Hollis, S. H. Hooke, E. O. James, W. O. E.
Oesterley, T. H. Robinson. Edited by S. H. Hooke, with
a foreword by D. C. Simpson, D.D., Oxford University
Press. 1933. 5\frac{1}{4} \times 7\frac{3}{4}. \text{ xix} + 204 pp. 20 illustrations. Price 10s. 6d. net.

The main object of the seven essays, which compose this book, is to trace in Bible Lands phases of the ritual pattern outlined by Dr. Hooke in the first of them. This is shown to exist, both in the Egyptian Annual Festival, described by Dr. Blackman, and, in a closely allied form, in the Babylonian New Year ceremony dealt with by Mr. Gadd, and isolated fragments of it are sought in Canaanite mythology and in the Old Testament. Professor Oesterley summarizes the evidence for the last in what is, in some ways, the most interesting of the essays, and though many scholars will not agree with the post-exilic date he assumes for those psalms from which he quotes largely, this affects only a portion of the large body of material he produces.

The team work of the various writers is excellent; there is little repetition or disagreement upon the main A few lines on the resemblance between the Ritual Pattern, as outlined on page 8, and that found in the Greek Drama, notably in the Bacchæ of Euripides, and also in our own Mummers' Play, would have shown the general reader, for whom the book is intended, that the pattern is found far West of the selected area, and would have linked up the subject with another great field of intellectual achievement. But, in its own selected limits, the book is a valuable contribution to the study, not only of the Old Testament and ritual, but also of the H. C. L.

Israel from its Beginnings to the Middle of the Eighth Century. By Adolphe Lods. Translated by S. H. Hooke. $9\frac{1}{2} \times 6$ in. Pp. 512, with 16 plates and 3 maps. London: Kegan Paul, 1932. Price 25s.

The author of this volume, which is in the well-known series, The History of Civilization, edited by C. K. Ogden, is a professor at the Sorbonne, and the translator is professor of Old Testament Studies in the University of London. It presents an absorbing study of the interaction of the culture of the Canaanites and that of the Hebrews. Drawing upon archeological and other evidence Lods attempts to reconstruct the social organization and religion of the Canaanites at the time of the Hebrew invasion; then he does the same for the pre-

Mosaic Israelites. Needless to say, this part of his work is based upon a thorough-going analysis of the relevant books of the Old Testament. Since none of these writings dates back to the time of Moses, he is driven to seek for survivals in the later literature. This is a somewhat hazardous procedure. To quote the words of Sirach (second century B.C.) about the dead returning to "the mother of all living" as evidence that a belief in the Earth-Mother formed part of the religion of pre-Mosaic Israel is not convincing; still less to quote the words of Jesus, "if thine eye be evil . . ." as evidence of a belief in the Evil Eye at that early period. Some-times, it appears to us, he puts a forced interpretation upon texts in order to fit them into his scheme, as when he cites " a man shall leave his father and mother and " shall be joined to his wife" as evidence for matrilocal marriage. Having completed his reconstruction, he proceeds to study the result of the mingling of the nomadic Hebrews with the sedentary Canaanites who possessed a higher grade of civilization but who were on a lower moral plane. This part of the work is very illuminating, and, generally speaking, convincing. The Hebrews adopted the main elements of the culture of the people whom they conquered, and their conception of Jahweh was enriched by incorporating Canaanitish animistic beliefs, without, however, changing its fundamental character. The resulting fusion led to a strong reaction under the teaching of the Prophets against those elements that were incongruous with the developed belief in the Holy One of Israel. Professor Lods' book is to be warmly commended for the light it throws upon the Old Testament and as a study in the culture contact of two Semitic peoples.

EUROPE.

The Geography of the Mediterranean Region. Its Relation to Ancient History. B Ellen C. Semple, 14×22.5 cm. viii +

737 pp. London, 1932. Constable. Price 21s. Professor Philippson's book, 'Das Mittelmeergebiet,' which students have used so much, carefully avoided reference to classical antiquity wherever possible. Professor Myres' famous introduction to the 'Cambridge Ancient History ' dealt chiefly with prehistoric times and was evolutionary in its sequence of treatment. Sir George Adam Smith's fine prose on the 'Historical' Geography of the Holy Land' was written, as it were, around the Bible. The late Miss Semple, with characteristic sincerity, devotion and industry, set herself the task of studying the references to environment in classical literature and of investigating related problems on the spot. Her mind was always orientated towards a view of the environment as an inescapable influence upon man; climate rather than economic relations was always the factor governing crop distribution unless the reverse could be clearly proved; orography rather than political relations was the determinant of routes. This gives a bias to the book that needs correction at times, but it adds vitality to it in many ways, and the bias is not nearly so marked as in Miss Semple's former books.

It is of special interest that this book is the work of one who was primarily a geographer rather than a classical scholar or an archæologist. Those for whom the period of classical antiquity is but the culmination of a long phase of prehistoric development will feel the gap in this book, which pays little attention to the world opened up by Schliemann and Evans and their followers. The writer has read and quoted the classics very widely, and she uses them to illustrate her points which she groups, not regionally, but under four headings: General Geographic Conditions, Barrier Boundaries, Vegetation and Agriculture, Maritime Activities; an index, however, allows the reader to collect data for many localities and the bibliography and references in the text are characteristic of Dr. Semple's

energy as a collector.

Miss Semple adopts the view that the climate has been constant, and quotes many writers in favour of her view without discussing more recent ideas arising from archæological studies and from soil studies, both of which at any rate suggest variations of annual rainfall of some consequence. Miss Semple had been in poor health for some time before her death, and this no doubt explains the absence of references to Rostovtzeff's and to Ebert's work on South Russia. Minns (misprint Mimms) is quoted from time to time. The orographical and climatic influences on the situation and character of human groupings are described with many appropriate references and examples that some students will wish to supplement for themselves by thoughts concerning the spread of ideas of cultivation and settlement to the Mediterranean lands in the strict sense from the Euphrates and the Nile and other possible centres of the earliest civilizations. The statement that the eastwest route of the Mediterranean was first explored by the Phœnicians needs serious qualification nowadays. But it is evident that many students must supplement one another's work in dealing with the Mediterranean area, and all her readers will be anxious to pay a tribute of high respect to the learning and industry of Dr. Semple shown in this book, which unfortunately has proved to be her last.

H. J. F. has proved to be her last.

EGYPT: HISTORY.

Précis de l'Histoire d'Egypte par divers toriens et Archéologues. Tome 1; L'Institut Français d'Archéologie du Caire, 1932. London: 144. Mesers. Bernard Quaritch, Ltd. 12s. 6d.

M. G. Hanotaux has in hand a History of the Egyptian nation on a large scale, but as no popular history has been published for many years and existing ones do not incorporate the latest discoveries, H.M. the King of Egypt, always active in the interests of science and art, has ordered the publication of a 'compendious précis in

three volumes, of which this is the first.

The first section, of 47 pages, contains a novelty in a sketch of the prehistoric age, to which anthropologists will turn with the greater interest that it is compiled by Father Bovier-Lapierre, well known for his field work on flint implements round Cairo. It is but a sketch of which a considerable part is taken up by a slight outline of European prehistory and its correlation with Egyptian; it is brought well up to date, with references to the recent work of Miss Caton-Thompson, Dr. Sandford, and Herr Junker. A useful feature is the enumeration of the various localities where remains have been found, with classification of the remains. The flint industries of North Africa are touched on, without descriptions, and equations are suggested with Europe and Egypt. The author appears to accept a S'baikian stage, whereas, up to now, the implements thus named have only been found in surface deposits and should be handled with caution: eoliths he does not admit and seems hardly to accept the idea of African pluvial periods. In some passages he appears to confuse copper with bronze, and in the slight outline of the geology of the country he apparently follows, in the matter of earth-sculpture, an older generation of geologists, looking on volcanic action as the fundamental factor in the process.

There is no bibliography, readers being referred to that of H. Lorin in t. II of his Géographie Historique,

published by the Institut Français at Cairo.

The second section, of 202 pages, concerning pre-dynastic and Pharaonic Egypt, has been entrusted to

the experienced hands of M. H. Gauthier. His previous work is a guarantee of careful attention and a thorough knowledge, of the kind, especially, that is useful for a précis. The main facts of dynasties and kings, their wars and fortunes, are recorded with crispness and clarity; well-considered solutions are given of most problems of dynastic times, and the reader is duly warned when doubt exists; the author keeps studiously

aloof from theories not well proved.

To come to details, he looks on Semitic conquerors, with whom he connects the Falcon folk of Upper Egypt, as founders of 'the dynastic race'; he gives a summary of Sethe's theory on the course of tribal movements and conquests in prehistoric times and appears to accept it since he is silent on its vulnerable points—yet it does not fit in with his 'Semitic' theory just noticed. Like Scharff and others, he considers it unlikely that the solar calendar was formulated in the remote and barbarous age which has been commonly accepted. Against current opinion, he doubts the existence of 'matri-He is silent on the revolution which ended the Old Kingdom, though that is a matter of much importance for the understanding of ancient Egypt. He records little to make clear the position of the country before the New Empire with regard to its neighbours and especially the connections with Nubia and Punt in the south and the circumstances of Egyptian trade with them. At the end of each of the three principal periods a chapter is devoted to a summary of the culture of the time, admirable within its limits, but too brief to allow the recording of many significant features which might serve to illuminate the period, such, for example, as the human sacrifices at the burial in Nubia of Hepzefa, a governor of the 12th Dynasty, or the taking by Psammeti-chus I of an Assyrian name. The invasion of the Hyksos is related with Aryan and Hittite movements, but no account has been taken of Hrozny's illuminating studies in the matter.

Among small points noted are a confusion of copper with bronze, as in the mention of Pepi's famous statue; the statement that the white-painted pottery of the Early Predynastic period was made on the wheel, which did not come into use till the 3rd to 4th Dynasties; the domestic fowl is given a place in the poultry-yards of the proto-dynastic age, whereas the first record of it is in the 18th Dynasty; recent work on the character of

the ka is ignored.

But these are small points; in sum, M. Gauthier's is an admirable 'précis,' bearing out exactly the title of the book.

The same must be said of M. Juguet's share, but the material at his disposal is more plentiful, and accordingly the 283 pages which he has devoted to the Ptolemaic and Roman periods are crammed with detail, well handled and affording a real if concise picture of the state of the country at its different stages. The administrative system taken over and developed by Ptolemy I and many succeeding modifications are clearly and fully shown and the pages describing the cultural and commercial conditions of the country are of real value to the general student. The bibliographies attached for each period are full and well arranged and should be very useful for readers wishing to push their studies further. A large list of books is also provided at the end of the chapters on the Pharaonic period, but it is of a general nature and would hardly serve as a guide for studies. The volume concludes with a list of Pharaonic kings, with dates, by M. Gauthier, whose great work on the subject is well known, and this is followed by M. Juguet's tables of synchronology for the Ptolemaic period, genealogical table of the Lagides and list of the prefects of Egypt and patriarchs of Alexandria, founded on the works of J. G. Milne and A. von Gutschmid. G. D. H.

MISCELLANEOUS.

Was bedeutet Herman Wirth für die Wissenschaft? Essays edited by Dr. A. Bœumler.

Leipzig 1932. 8vo, pp. 94. Readers of Herman Wirth's Aufgang der Menschheit (1928) and of Die heilige Urschrift der Menschheit, now in course of publication, will know what to expect in this booklet. What some will note with surprise is that serious specialists in such different lines as Theodor Preuss and Josef Strzygowski have thought it worth while to join in the controversy-which has become rather acute in Germany—and to set out what they regard as of serious value in Wirth's writings—or is it rather in the personality that stands behind them? Wirth's unusual ingenuity in seeing resemblances where no one had noticed them before, leads one of his admirers to compare him with Heinrich Schliemann. Another writes that Wirth has "abolished the boundary between "pre-history and history, between the study of symbols and critical historical method " (p. 93). Let us leave it at that.

The Museum of Far Eastern Antiquities, Stockholm, Bulletin No. 3. Stockholm, 1931. 8vo. iv+176 pp.

Numerous plates and illustrations. This number contains five essays. discusses the 'Early History of the Chon Li and Tso Chuan Texts,' arguing that "few ancient Chinese texts " are so well supported, in regard to their character of " pre-Han texts." Arthur Waley has a short note on late survivals of the 'Magical Use of Phallic Representations in China and Japan,' suggested, like Eduard Erkes' 'Remarks on Karlgren's Fecundity Symbols tin Ancient China' by an article in Bulletin No. 2 'in Ancient China,' by an article in Bulletin No. 2. Hanna Rydh describes 'Seasonal Fertility Rites and the Death Cult in Scandinavia and China,' rather a far cry, but replete with folklore. Olov Janse publishes a 'Group of Ancient Bronzes peculiar to the Far 'South of Asia,' fully illustrated, and raising important questions as to the early spread of bronze-working in Asia generally, and on the ramifications of the 'beast-'style' of decoration, and of spiral and plaited ornaments.

CORRESPONDENCE.

Origin of the Double Stabilizer on Canoes.

Sir,-In Mr. Lothrop's recent paper, J.R.A.I., lxii, 1932, pp. 229-256, he deals at some length with the interesting problem of the use of stabilizing logs on the sides of dug-out canoes. In his speculations on the origin of this device, he refers at length to Mr. Hornell's paper in Man, 1928, 102. Both writers hold the view that "Polynesia is an unlikely "centre of distribution because the double outrigger "is scarcely known in this area, while Spanish contact "was ephemeral. On the other hand the Spaniards "established permanent settlements in the Philippines "and maintained regular trade routes to the New "World." They both, therefore, draw the reasonable conclusion that the use of this device may have been diffused, with Spanish assistance, from Micronesia.

As Mr. Hornell says, the Polynesians had outgrown the double outrigger and restricted themselves to the more seaworthy single outrigger cance. But it would seem reasonable to suppose that the double stabilizer developed not from the double outrigger but from the single hull. If we accept Mr. Hornell's conclusion that the double balanced log stabilizer is the first stage in the development of the double outrigger, we cannot logically believe anything else. If, therefore, we wish to look outside America for the origin of the invention, we must find some place in the Pacific where there are single hull cances. Probably the cances of the Solomon Islands are the best known, and on these craft Mr. Guppy has some interesting remarks to make. "For sea"passages," he writes, "greater stability is sometimes
"given to the large cances of the straits by temporarily
"fitting them with an outrigger on each side in the "For sea-"form of a bundle of stout bamboos lashed to the ends "of three bamboo poles lashed across the gunwale "of the cance." Unfortunately, he does not mention the length of these three bamboo poles, but he emphasizes the temporary nature of the floats.

The use of hollow bamboos, too, is interesting, for they would be the nearest Solomon Islands counterpart to the light balsa wood of the South American coast. I would not suggest that there is any direct cultural link between the Solomon Islands and the Pacific coast of South America, but H. Balfour, in Folklore, 1917, has made out a very good case for Melanesian, and possibly Solomon, influence in Easter Island. But, if

1 Guppy. The Solomon Islands and their Natives.

we can accept Guppy's description as meaning temporary bundles of bamboo lashed close to the sides, and we also consider the above-mentioned paper, we have two points of considerable importance. There was a group of people in the Pacific which normally used single canoes but stabilized them by temporary 'outriggers,' and this group is known to have moved about the Pacific a good deal. It is not impossible, therefore, to postulate the arrival in America, whether by Spanish influence or otherwise, of the stabilizing device from Polynesia or perhaps even Melanesia. ADRIAN DIGBY.

Childhood and Totemism (cf. Man, 1932, 62; 1933, 95). SIR,-Here are two small contributions on the above subject, one from a personal experience in Scotland, the other from a personal discovery in Albania.

Somewhere between 1906 and 1909 a college friend of mine, who had become a schoolmistress near Elgin, whispered to me in awestruck tones a tale that had been similarly whispered to her. A woman, name not known, had lately given birth to six or seven puppies in the General Hospital, Elgin, the doctor destroying them all.

To this day I have hardly enough physiological knowledge to say positively that the tale is an impossibility, and at the time my friend and I were no more than mildly sceptical. Just grown up, we were finding that a great many things beyond our comprehension happened in the world. We were truthful ourselves and had no experience of persons who told lies for fun or otherwise. Above all, the manner of the telling carried conviction. In short, in two respects at least we were in the mental position of peoples in the totemistic stage.

As for my second contribution, many illiterate Albanians believe that a monkey is half-human because it is the offspring of a dog and a gipsy woman and has therefore fed at a human breast. This they have deduced from watching the antics of a performing monkey when touring with a gipsy man, the misguided eleverness of the deduction being typically Albanian. They know nothing about the existence of other monkeys, of course. They believe that such monstrous births are common among the gipsies because monkeys make a lot of money and gipsies like money and do not mind what they do to secure it. No Albanian woman, however, has been known to have unnatural offspring.

MARGARET HASLUCK.



Fig. 1. HACKING OFF THE LEG.



Fig. 2. OPENING THE ABDOMEN, DECAPITATED HEAD ON RIGHT.

MUTILATION CEREMONY IN SPITI, WEST TIBET.

Photographs by Dr. Bhagwan Singh.

MAN

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ORIGINAL ARTICLES.

With Plate M.

Tibet: Disposal of the Dead.

Disposal of the Dead by Mutilation in Spiti (W. Tibet). By Dr. Bhagwan Singh.

Singh.

The district called Spiti is now under British administration, and forms a part of the Kangra District in the Punjab. On all sides it is surrounded by the snowy ranges of the inner Himalayas. The whole of this country lies on the banks of the Spiti river, which in turn is a tributary of the Sutlej. The altitude of Spiti is from 9,000 feet to 14,000 feet above sea level.

About a century ago Spiti was a part of Central Tibet, since when it was annexed by the then Raja of Kashmir, and subsequently taken over by the British Government. The inhabitants follow the Buddhist faith as practised in Tibet, and are of Mongolian origin, with an admixture of Aryan blood. Practically all their customs are derived from the usages of pure Tibetans.

I propose in this article to give an account of one special mode of disposing of the dead—disposal by mutilation. As has been already stated by the Rev. Walter Asboe, in his account of the disposal of the dead in Tibet, there are four methods employed when disposing of the dead. They are (1) Mutilation of the corpse by chopping it in pieces; (2) Cremation on a funeral pyre; (3) Burial in the earth; and (4) Throwing the corpse into the water.

I was informed that whilst the corpses of laymen may be disposed of in any of the four ways already mentioned, ecclesiastics are always cremated on a funeral oven made of stone or earth in the form of a square. This applies especially to Spiti, for in other parts of Tibet both clergy and laymen alike are cremated after death on a funeral pyre of logs.

The most propitious time for mutilating corpses is when the harvesting and winnowing operations are performed, whilst at other seasons of the year the mode of disposal is determined by the lamas (priests) who consult their religious books for the most auspicious method.

The site chosen for the mutilation ceremony is usually a good distance from the village. Here again the lamas are consulted as to the most propitious position—whether it should be the north, south, east, or west of the village.

During the month of August, 1932, I went on a medical tour to Spiti, and I was fortunate in visiting a village where the mutilation ceremony was performed.

On August 26th I reached a village called Manay, situated on the right bank of the Spiti River. On arrival there about midday, I was informed that a young man suffering from pains in the abdomen had died early that morning.

On inquiry, the villagers told me that the day before my arrival the deceased went with some people from the same village to repair a road running between Pow and Manay. Whilst lifting a boulder which had obstructed the road, he felt slight pains in his belly, causing him to abandon his work and proceed home. These pains increased in severity, followed by vomiting and acute constipation. The pains were spasmodic, and localized in the region of the navel, and he was unable to lie on his back, but remained in a sitting posture until his death.

A local doctor (Amchi) was called in to attend the sick man, who was given certain purgatives which were vomited as soon as they were administered. The duration of the deceased's illness was only one day.

Having heard that the body was to be disposed of by mutilation, my curiosity was aroused, and I determined to witness the ceremony first-hand. To achieve this end I was obliged to simulate great interest in the local religion, and professed myself an ardent Buddhist. To my surprise I received consent to follow the funeral cortège, and to be present at the actual ceremony of mutilation.

The place where the mutilation ceremony was performed was on a small hillock by the side of the Spiti river, about a mile and a half from the village. Eight men carried the dead man on an improvised bier made of four rough pieces of wood crossed in such a way as to form a square shaped seat. Immediately after death the deceased's neck was broken by one of his relations. The lower part of his right leg having been flexed at the knee joint and placed over the middle third of the left thigh, so that the calf muscle was clearly in evidence, a yak hair rope was passed in a figure of eight round the leg, thigh, and neck, bringing the head down very close to the knee. The corpse thus trussed was placed on the bier, with two relatives leading the funeral procession. Behind the eight bearers of the corpse came some villagers amongst whom were two men, one carrying a log of wood, and the



FIG. 3. CARRYING THE DEAD MAN FOR MUTILATION.

other an axe and hunting knife.

About two furlongs from the village the procession reached a prayer wall. At this point the two men leading the procession returned to their own village bearing flags and a banner with a goddess painted upon it.

On arrival at the site of the mutilation ceremony, the body was taken out of the bier, and the clothes and funeral ornaments stripped from the dead man so as to expose him naked. Two lamas (priests) then took up a position about thirty feet from the corpse, and faced eastwards, whilst another lama squatted on the ground to the south of the site of mutilation. These men held ritualistic instruments in their hands, and muttered prayers.

In the meantime, the executioner on whom the main business of mutilation devolved, placing himself in front of the corpse drew it over to a flat stone just visible above the ground. Then, after cutting the rope which secured the deceased lest he should rise and do some harm, he laid the dead body on the stone with its knees in a flexed position. This done, he placed the log of wood under the cervical region, cutting with his hunting knife the skin, fasciæ, muscles, and other soft structures of the neck. Then taking the axe from his girdle, he severed the head from the body, and placed it close by. He now proceeded to open up the abdomen. First, he caught the abdominal wall in the epigastric region with his left hand, and with his right he introduced his knife at the tip of the xiphoid and cut the abdominal wall horizontally, and the flap thus made was turned downwards over the pubic region.

On opening the abdomen fæculent fluid gushed out. The small and large intestines were semidistended and bulging. It being of great importance to ascertain the disease which caused the deceased's death, the mutilator used a small piece of stick to elevate and examine the intestines. His verdict was that the man had died from a fatal bilious attack, though so far as I could see the liver was quite normal.

Standing close to the body I could see that the intestines were distended, and part of the small intestine was chocolate colour (gangrenous). Besides this it had the appearance of having been ruptured and perforated, which fact rather confirms my belief that the extremely violent aperients administered to the man during his brief illness produced these disastrous results.

The operation of opening the abdomen completed, the executioner disarticulated the left ileofemoral joint by first cutting the soft structures, fasciæ, and tendons around it, though there appeared to be little system in his procedure. Huge pieces of flesh were sliced from the thigh and buttock down to the knee, these being thrown on to a large flat stone nearby. When the joints at the hip and knee were cleared of flesh, the tendons and fasciæ were severed, and the femoral bone was disarticulated and laid on one side. (This bone was specially kept to convert into a lama's human thigh bone trumpet.) That part of the leg below the knee, he chopped with an axe into big chunks, throwing these on the slab of stone also. Followed the hacking off of the right arm near the insertion of the deltoid muscle, after which the whole of that limb was chopped in lumps and likewise placed with the other pieces of flesh. The next step was to extract the contents of the abdomen, i.e., intestines, liver, spleen, and stomach, placing these on the already large pile of flesh, et cetera. The pleural cavity was then opened by cutting and hacking the ribs with his axe, and the lungs and heart were severed from their adhesions with his hunting knife, these organs being similarly thrown on the stone nearby.

The right leg was then treated similarly to the left; after which the left arm was mutilated and disposed of. This done, the spinal column was hacked in pieces, the ileum and sacrum being also

treated similarly.

I noticed that the mutilator did not dissect and mutilate the head which he had chopped off in

the early stages of the ceremony, but threw it down the bank of the river.

It is commonly believed that so long as the head lies in close proximity to the rest of the mutilated parts of the corpse, carrion birds and beasts of prey will not approach. Towards sunset, the time at which the mutilation ceremony took place, I saw no birds about, and this was thought by the relatives to be an ill omen. Further, if they should not appear within one or two days, the deceased is deemed to have been very wicked during his life-time.

The current theory to justify the disposal of a corpse by mutilation, is that thereby the dead cannot rise again. Others, however, affirm that human flesh is a special delicacy which the gods enjoy.

In Spiti, the office of mutilator of corpses is not hereditary, nor does it belong to a professional class of executioners, the members of which are not allowed near the precincts of a temple, as is the usage in Central Tibet. The corpse mutilator is usually a relative of the deceased.

When this task is completed, he returns to the deceased's house, outside of which is placed a vessel of warm water so that he can bathe himself and change his clothes. In return for his services, he is well fed and paid by the family to which the deceased belonged.

BHAGWAN SINGH.

India: Technology. Decorated Carnelian Beads. By Ernest Mackay.

Mackay.

The decoration of ancient carnelian beads with designs in white and sometimes black is in itself of interest, as the technique involved must obviously have needed skill. Still more arresting is the fact that these decorated carnelian beads have been found in countries as far apart as India, Mesopotamia and Russia—in the first two countries at a very early period, namely, in the Third Millennium B.c. I have, in consequence, tried to ascertain if this process is known and practised at the present day; and I am told on very good authority that carnelian beads are still so decorated in Persia, a country which I have not yet visited. Three localities in India have also been mentioned to me in this connection—Delhi; Cambay, the capital of the State of that name in Western India, where agate and carnelian are still worked, though it seems to be a decaying industry; and Sehwān in Sindh. But, as far as I can gather, carnelian is now no longer painted in either Cambay or Sindh, and there is apparently no evidence that the stone is painted in Delhi, though it is still cut there, but in a diminishing degree owing to the lack of demand.

I have, however, been fortunate enough to learn the process from an old man of Sehwān, in middle Sindh, named Sahebdino, whose acquaintance I made in November, 1930, through Mr. N. G. Majumdar, also of the Archæological Survey of India. Sahebdino, who learned it from his father, Muhammed Morial, at the age of 9 or 10, is now over 70 years of age, but he had not practised this

¹ The material is still procured from a conglomerate and the village of Ratanpur, in the Rājpīpla State. engravers.

The industry is said to be over 2,000 years old.

craft for some 55 years owing to the lack of demand for this kind of work. Besides himself, he told us, there was a man living in Hyderabad, Sindh, until a few years ago, who also knew the method of painting carnelian; but this man is now dead and he, Sahebdino, and his son are the only people in Sindh who know the process.

After a little persuasion the old man got his materials together and showed me the process, which is a very simple one. First, he carefully macerated the tips of young shoots of a bush that is



Fig. 1. Sahebding and his son mixing kirar juice.

common in Sindh and the Panjāb, Capparis aphylla (Sindhi: Kirar), in a glazed pottery bowl with the aid of a wooden stick with a rounded end. This maceration was done without the aid of water until a thick pasty mass of an olive-green colour was produced (Fig. 1).

Sahebdino then ground ordinary European washing soda to a fine powder, and after carefully mixing it with water in a cup, he poured a small quantity on the *Kirar* and rubbed the whole carefully together to a semi-fluid mass.

This the old man strained through a piece of linen into a large empty mussel-shell, and the paint was ready.

A piece of polished red carnelian, such as a bead or a plaque for a talisman or ring, is then fixed in a setting made of clay mixed with cotton-wool.³ When the setting is dry, an inscription or design is written or drawn upon the exposed polished surface of the carnelian with a reed pen filled with the paint. At first it is difficult to see the design, but when the paint has dried it shows quite clearly in white upon the surface of the stone. A sure and steady hand is needed to prepare an elaborate design, for re-touching can only be done successfully before baking, and even then traces of bungling may be evident.

The painted piece of carnelian, still in its setting, is placed on a piece of sheet-iron and laid on the embers of a charcoal fire until the design is perfectly dry. The carnelian is then buried in the embers and the fire slowly fanned for about five minutes (Fig. 2). The stone on removal from the fire is taken from its clay setting and placed under a small cup to cool down gradually. After about

ten minutes it is sufficiently cooled, and at this stage Sahebdino rubbed his piece of carnelian briskly with a rag and handed it over for inspection. It is noteworthy that he used no crucible or muffle. Nor did the charcoal fumes cause any permanent staining of the white design on the carnelian; it was only temporarily darkened by the fire and was readily cleaned up with a cloth.

The old man preferred to use European washing-soda as being purer. When this is unobtainable, ordinary native soda will do, but it needs to be mixed with a little white vinegar for some reason which I could not exactly ascertain.

What particular action the *Kirar* has on the soda it is difficult to say. I am inclined to think that in some way it prevents the soda from scaling off the carnelian during the process of heating, and that except for this it has no further use. At all events, its dark green colour entirely disappears



Fig. 2. Samebdino firing a Carnelian. The fan is used to create a draught. The portable hearth is entirely open and no crucible is used.

³ The cotton wool prevents the clay from cracking in to protect the carnelian as much as possible from flame-the process of drying. The setting is evidently intended contact.

in the baking, leaving only the white colour of the soda behind. It may perhaps be comparable in action with the fine oils that are used in enamelling jewellery, which are added merely to serve as a temporary adhesive until the enamel is sufficiently fluid to stick by itself, by which time the oil entirely disappears. In fact, this treatment of carnelian with soda gives a result that is very similar in appearance to enamel.

The old man told me that the fine red carnelian used to come from the Yemen in Arabia, and is considered to be the best in quality. The pale red and orange-red varieties come from Khambat in Gujarat, in the Bombay Presidency. The carnelian arrived in lumps and nodules, and it was cut up into beads or plaque-like pieces for amulets with the aid of a bow saw with a fine iron wire blade. The abrasive used was emery, which comes from Mirzapur in the United Provinces via Delhi.

I have made a few experiments in my limited time and find that Sahebdino's process is quite workable with the aid of a charcoal brazier or a spirit bunsen burner; but still better results are obtained if the carnelian be fully protected from flame by being enclosed in a small crucible or muffle. It should be noted that Sahebdino only used flat plaques of carnelian to work upon, which, when properly set in their clay casings, were more or less protected from possible risk of damage. When given a barrel-shaped bead to decorate he said that it could not be done. Yet barrel-shaped beads were also decorated by this process in ancient Sumer without any loss of colour or translucency.

Having myself found it an easy matter to decorate flat carnelian beads without their losing their colour or translucency, I next set about experiments with some ancient carnelian beads of a rounded shape. But I met with scant success at first, for the reason that ancient carnelian beads through lying in wet or damp soils are impregnated with various salts; they readily become opaque and lose their colour long before the necessary heat is reached to fuse the paint of carbonate of soda. Accordingly, I procured some freshly-cut, barrel-shaped carnelian beads from Jaipur 4 for my experiments and obtained the following results :-

The juice of the Kirar plant is not really necessary. It was proved to act only as a temporary adhesive, and it also helped to dry the carbonate of soda quickly. In fact, it was found that a paint of carbonate of soda and water after judicious heating produced identically the same results as when Kirar was used. Care had to be taken, however, that the paint did not flake off before it had properly fused.

The disadvantage of using a solution of carbonate of soda and water with or without an admixture of the juice of the Kirar is that the resulting paint is transparent until it has dried. It would, therefore, have been difficult for the painter to see what he was doing unless the stone was slightly heated first to dry the paint as the design was being proceeded with. This was found to be quite feasible, but the lines of the design were inclined to become ragged if the drying were over quick. The addition, however, of a little carbonate of lead or of any soluble lead salt (e.g., acetate or sugar of lead) to the carbonate of soda produced very desirable results. The two formed a white paint which readily adhered to the smooth surface of the carnelian and when heated fused quickly. The addition of the lead sometimes yellows the fused design slightly, but this colour is only superficial and a little rubbing removes it when the stone is cold.5

It was found, however, that some of the carnelians lost their colour slightly after heating, especially if the latter process was prolonged. The addition of a little borax to the soda-cum-lead mixture was found to lower the temperature of fusion very considerably and minimized this danger to a very large extent.

Carnelians vary enormously in their resistance to heat. Some stones of a deep red colour can be heated red hot with a minimum loss of colour or transparency. Others, apparently of the same grade, rapidly turn pink, or white and opaque. I should think that resistance to heat is inherent in certain types of carnelian, and that the worker in ancient times was as much troubled with the

not the deep red that I should have wished.

⁵ A Mr. Bellasis states that a mixture used at Schwan many years ago (1854) included potash, white lead and this ingredient. Kirar. See Cousens: Antiquities of Sind, p. 55. Arch.

⁴ Unfortunately, these beads were a pale colour and Surv. Ind., Vol. XLVI, Imperial Series. Sahebdino certainly used no white lead in his mixture. There is a possibility that he may intentionally have omitted

behaviour of his material as I have been myself. This resistance may be proportionate to the degree of heat to which they have been subjected in the process of colouring—a process practised in Western India from time immemorial. The worker probably had a great number of failures and it is possibly owing to this that really fine decorated beads are so scarce. The best of these beads, by which I mean those of a really deep red colour, are found in early Sumerian sites where they are comparatively rare and were doubtless much valued. In very early India, decorated carnelian beads were certainly rare, but in later times they became much more common, though, it seems to me, inferior in colour, as if the technique were slowly dying out. ERNEST MACKAY.

Balkans: Religion.

The Making of a Saint. By M. E. Durham.

Durham.

151 Chance has thrown into my hands a pamphlet published at Cetinje, Montenegro, containing a number of State documents recently discovered in the palace of the late King Nikola. Among them is the original Proclamation of the sainthood of Vladika (Bishop) Petar I, the King's great-great uncle, who died on 19th October, 1830.

It is still customary among many members of the Eastern Orthodox Church to open the grave from three to four years after burial—at such time when the corpse may be reasonably expected to have decayed—cleanse the bones and store them in an ossuary. And in many places until quite recently it was customary to put food upon the grave and hold funeral feasts at stated intervals so long as the body remained in the grave: a custom possibly not yet extinct. I found it flourishing thirty years ago.

In the rare cases in which the corpse has become mummified the fact is looked on as a miraculous sign that life everlasting among the saints has been attained and the corpse is accordingly venerated. This was the case with Bishop Petar Petrovitch I.

The pamphlet is entitled 'Spomenica'; it is edited by Dushan Vuksan and printed at Cetinje, 1926. The passage in question runs as follows:

"THE PROCLAMATION OF THE METROPOLITAN PETAR I AS A SAINT."

The Proclamation of Vladika Radé (his popular name) in which it is told that the body of Petar I was disinterred on 18th October, 1834, and on that occasion was found to be quite complete, was printed in Cetinje in 1834. But whether this Proclamation, which was made "to the whole nation of Montenegro and the Brda," went beyond the frontiers of Montenegro, is unknown to me (the Editor).

I found in the archives of the Palace in the fascicle of the year 1834 one single copy of this Proclamation and herewith publish it in entirety. It is printed on blue paper of large format and on it is the autograph signature of the Vladika (Petar II). The Proclamation announces:

"FROM OUR VLADIKA

"PETAR PETROVITCH

"TO THE WHOLE NATION

" OF MONTENEGRO AND THE BEDA1

" A PROCLAMATION AND A GREETING.

"We give ye to know, oh Godfearing nation, how we, on the 18th of this month on St. Luke's
Day did open the blessed grave of my holy Predecessor and your Archpriest (Arhipastir) Petar.
And when we had opened the grave we found complete the holy body of our Archpriest.

"Therefore, oh Godfearing nation, joyfully do we proclaim to you this fortunate event; for we know that ye will give thanks to the Omnipotent Creator who has sent among you the good father and mighty pastor of the Church and the Christian flock, your protector and saviour, in his complete body. That, just as when in his mortal body he was ready to give his soul and body for you, so

⁶ This was my experience at Kish, and to the best of my knowledge comparatively few of these beads have been found at Ur.

None have been found at Harappä and only eight at Mohenjo-daro.

^{*} I here refer to the decorated, not the ordinary kind.

¹ BRDA, a group of partly Albanian mountain tribes, annexed to Montenegro in 18th century and now slavized.

Clark.

" now we pray to him that, as a Saint and one favoured by God, he will pray to Almighty God for " us as for his own sons.

"I think oh Godfearing Christians that ye remember the words of St. Petar who said to you: "May ye live in accord and peace and unity.' I think that every one of you has kept these holy "and godly words in his heart since this man, so beloved of God, no longer lived among you.

"And now I hope especially that you will keep them, for you see him that spoke them is amongst you, sainted and complete. And you are assured—I think—that if any Montenegrin will not preserve 'accord, peace and unity' St. Petar will be his accuser both in this world and in the other; but let those that have enmity between them (i.e., bloodfeud) agree and make peace and thus they will be pleasing both to God and your Sainted Petar.

"Recommending you to God and His favourite and newly proclaimed Saint I remain,

" To each of you the well wisher,

"Vladika of Montenegro and the Brda,
"Petar Petrovitch.

"St. Luke's Day, Cetinje, 1834."

St. Petar Petrovitch was deeply revered by the Montenegrin peasants who almost always swore "By God and St. Peter." And, in fact, did not distinguish him from the great St. Peter. I have seen men strike their heads against his tomb and even against the door jambs of the Monastery church where he lies.

The other popular saint of Montenegro, St. Basil of Ostrog, a bishop who fied from Turkish persecution and lived in a cave in the mountain side at Ostrog, likewise derived his sainthood from the fact that his body was found to be intact. When I made the pilgrimage to this shrine, the body was packed in carbolized cotton wool. One foot was uncovered for me to kiss.

Such saints, I believe, are purely local and almost unknown to other branches of the Orthodox

Church.

The Vladika of Montenegro had no temporal power. Such government as existed in his time was purely tribal and conducted by the tribal headmen. The Vladika's power, which was very considerable, consisted in his power of blessing and banning. His curse was greatly dreaded and, if we may believe local tradition, it was most efficacious and the stern old man applied it freely.

Thus, being wrath with a recalcitrant tribesman he said "I wish you may die." The man

contracted smallpox and died soon after.

Again, the Vladika owned fishing rights in the lake and the fishermen had to supply a tribute of fish to the monastery. None arrived. The Vladika asked, why? The fishers replied that they had been unable to catch any. Time passed and still no fish. Again the Vladika asked and was told "there are no fish in the lake." "No," said he firmly, "there are none and there never will be any "more." And there were no more, till the terrified fishermen implored the Vladika to remove the curse and promised a plentiful supply of fish in the future.

As the fish in the Lake of Scutari are extremely plentiful at certain seasons and slacken between

whiles, we can only suppose the holy man timed his curse skilfully.

The skilful use made by his nephew and successor, Vladika Petar II, of the fact of the canonization, in order to stop the blood feuds which raged between the tribes at this period, should be noted.

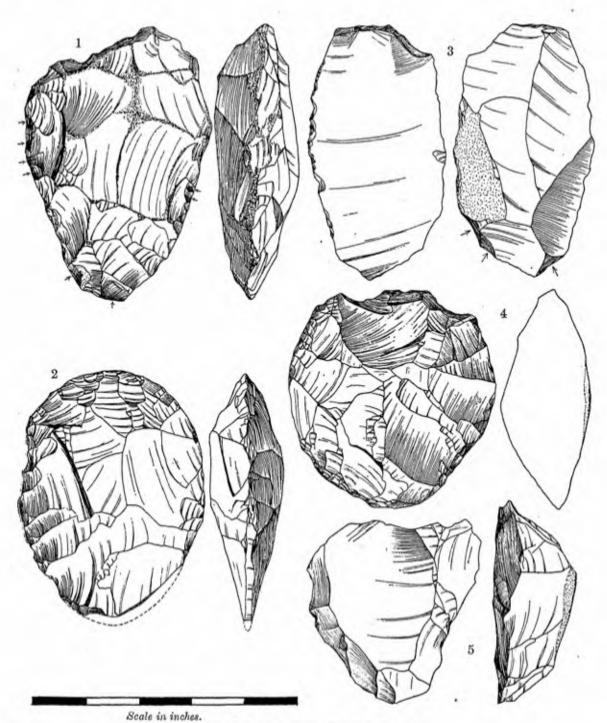
The Proclamation of 1834 is perhaps the last instance of sainthood by natural mummification. But how deeply rooted the idea is in the minds of peoples brought up in the Orthodox Church is shown by the immense reverence paid by the Russian people to the artificially embalmed body of Lenin. The tradition lives, though times have changed.

M. E. DURHAM.

Transjordan: Archæology.

Palæolithic Implements from S.W. Transjordan. By Grahame Clark.

The Keeper of the Ashmolean very kindly introduced me to the small series of flint implements gathered by Doughty on his famous travels and presented by him to the Museum in 1915. Though these have already been to some extent recorded (pp. 28-9, 35) and even illustrated after the fashion of the day in the classic 'Travels in Arabia Deserta,' they seem to merit more exact



PALÆOLITHIC IMPLEMENTS FROM S.W. JORDAN.

publication since they come from an area still very little known, at least as regards the earlier periods. Maan, where the flints were found in 1875, is situated in south-west Transjordan on the main caravan route from Damascus to Arabia Felix. Doughty made his discovery while walking in a freshet bed at Maan at an elevation of 4,200 feet. He gives a graphic account of it: "Walking in the "torrent bed at Maan my eyes lighted upon, and I took up, moved and astonished, one after another, "seven flints chipped to an edge . . .: we must suppose them of rational, that is of human "labour." The greater part of Mount Seir upon which Maan is situated is strewn with a 'widespread and often 3-fathom deep bed of gravel' evidently derived from the underlying chalk-rock in which Doughty says were "massy (tabular) silicious veins," for which reason the Arabs name all the region Ard Suwwan, the Flint Ground. The raw material was thus abundant and at hand. There seems very little doubt that one at least of the flint implements has travelled considerably in the torrent bed, as its heavy rolling indicates. At the same time it has to be remembered that the torrent bed is situated at 4,200 feet O.D. on "the highest platform of land in all that province" to use Doughty's descriptive language.

Turning to the implements themselves we may say first of all that all have been made from the same brown flint, and that each still shows traces of a whitish deposit. We may next describe the

individual characters of each specimen illustrated.

No. 1.—The flint is patinated to a dirty whitish grey colour, the processes of chemical change having affected the flint fairly deeply. It has also been subjected to fairly intensive water-rolling, as the battering on the edges and principal flake intersections well show. Typologically the implement may be compared to the *coup de poing* of the Late Chellean of the European classification.

No. 2.—The flint is brown, the surface being faintly flecked whitish indicating incipient patination. Otherwise the flint is remarkably fresh, though quite smooth to feel. As indicated in the illustration recent fractures have spoiled the lower cutting edge. Typologically a Middle Acheulean coup de

poing.

No. 3.—Creamy speckling around the area of the cortex points to incipient patination. The flint is smooth but shows no water-rolling. Typologically a pre-Mousterian Levallois flake with facetted butt.

No. 4.—Incipient patination is here betrayed by creamy speckles. The flint is smooth and shows the faintest traces of water-rolling. Typologically it may be described as an unstruck 'tortoise core' of the Levallois type. A small patch of cortex has been retained near the centre of one face.

No. 5.—No chemical or physical change seems to have affected this flint, which has a far fresher appearance than any of the others, the surface not showing the same smoothness. Typologically a

small struck 'tortoise core.' Note cortex in the same position as in No. 4.

In addition to the implements illustrated there is another Levallois flake with facetted butt. The flints seem to fall into three preservation groups, No. 1 showing extensive change both physical and chemical; Nos. 2, 3 and 4 showing only the very slightest changes; and No. 5 showing none at all. Typologically we have two phases of coup de poing, the later being apparently of much the same age as cores and flakes of Levalloisean type. A very similar series from the Wadi Gaza, some 100 miles to the north-west, was presented by Sir Flinders Petrie to the Museum of Archæology and Ethnology at Cambridge in 1929. The majority of these implements are rolled, the hand-axes of Chellean type showing more pronounced rolling than the hand-axes of Acheulean type and the tortoise cores and Levallois flakes.

GRAHAME CLARK.

REVIEWS.

SOCIOLOGY.

Sorcerers of Dobu. The Social Anthropology of the Dobu Islanders of the Western Pacific. By R. F. Fortune. With an introduction by B. Malinowski. Routledge & Sons, Ltd., London. 1932. 318 pp. Price 15s.

The 'Sorcerers of Dobu' is the most important social anthropological book that has appeared for some time. Several circumstances combine to lift it above the ordinary field work monograph. First and foremost it is undoubtedly the best field work account published since the 'Argonauts of the Western Pacific.' Dr. Fortune is a professional anthropologist and his book embodies the results of seven months' work with the people of Dobu living in the same archipelago as the better-known Trobrianders. To most field workers probably the chief difficulty about the book springs from those seven months. One wonders a little, not

that the writer knows his people so well after such a short stay but whether he would have been quite as dogmatic had he returned for a second seven months. Most field workers hitherto have found many of their first trip's conclusions sadly astray on their second.

The geographical situation of the Dobuans gives this book an importance even greater than it possesses as a piece of field work research. When sufficient monographs of sufficient importance are available for various parts of the world, the next step of anthropology must be the regional comparisons of cultures within the same linguistic, geographical or environmental areas. It would seem that North West Melanesia with such detailed accounts of single cultures available as those of Drs. Fortune and Malinowski, together with the survey work of Dr. Seligman and various smaller and less valuable sources, is one of the areas where a regional comparison will be possible comparatively soon. In other words Dr. Fortune's work merely by its territorial situation increases the value of the work of his predecessors in North West Melanesia.

But apart from its intrinsic value, to those anthropologists who are interested in methodology, 'The Sorcerers of Dobu' has an importance all its own. Dr. Fortune belongs to the general functional school, (properly so-called) initiated by Rivers and carried on along diverging lines by Radcliffe-Brown and Malinowski. His work owes much to the two later writers, but it is more than a copy of the methods of either. He has brought to the solution of the Dobuan problems the strict sociological viewpoint of American sociology (not anthropology) whereby the investigator of group behaviour deals only with tangible entities visible to as many field workers as care to look at the phenomena, and unchangeable by the preconceived ideas of those field workers. This desirability of tangible evidence upon which to base monographic generalizations is recognized of course, but never quite achieved by Professor Radeliffe-Brown (cf. 'Andaman Islanders, Chaps. V and VI), while it is entirely ignored by Dr. Malinowski. The entire lack of objectivity in the Trobriand branch of the functional method has always been fairly obvious, but nowhere is it more clearly shown than in the introduction to the book under Dr. Fortune found in Dobu that the susu group (the matrilineal group of brother, sister, and sister's children), and not the family, is the group with the most important social consequences for the individual. He draws (p. 19) a table to prove this, in which the respective gains and losses of the family and of the susu are tabulated side by side and draws the conclusion "that the social " organization sets heavily towards susu predominance." In his introduction Professor Malinowski contests this conclusion. In "his synthesis [Fortune] has omitted "two or three elements which obviously strengthen the "family" (p. xxvi), and proceeds to bring forward as 'gains' of the family such vague and meaningless expressions as "the strong emotional attitude of the "father," "the solidarity between a man and his "father's nephew," and various jealousies. The point is not whether such things exist or not in Dobu, but that from the strict sociological point of view of Fortune they are irrelevant. The gains and losses of the family as a part of social organization can only be counted in terms of social fact; and the "emotional attitude" of a father is not a social fact unless it is expressed in a social rule, as for example, by patrilineal inheritance.

'The Sorcerers of Dobu' ought to serve as a model for

'The Sorcerers of Dobu' ought to serve as a model for future field workers. In detail, insight and method of presentation it will bear comparison with any previous monograph; in objectivity it probably surpasses them all, since it avoids equally the unprovable historical conjecture of the American schools and the unknowable psychological guesswork of Dr. Malinowski and the Freudians. It is only to be hoped that when he produces another monograph Dr. Fortune will write it in English a little less obscure and a little less peculiar to himself. C. W. M. HART.

Studies in Sociology. By Morris Ginsberg, M.A., D.Lit. Methuen & Co. London, 1932. ix + 211 pp.

Appearances, in the present volume, amply justify the aphorism. Its modest title and slim proportions give no indication of the amount of scholarship, and the preoccupation with the fundamental problems of sociology which infuse the essays it contains. Although most of them have previously appeared in various journals, and although they cover a wide range of topics, a uniform purpose can be detected in all. It would not be wrong, I think, to say that Professor Ginsberg's aim is to evaluate critically, in the light of relevant fact, the position of a number of major methodological issues in sociology.

He sets out, appropriately, from a consideration of "the scope of sociology." As in all of the essays, the argument is deployed with admirable lucidity, despite its terseness—a quality which makes adequate summary in a brief review impossible. Professor Ginsberg concludes that sociology has a distinct subject-matter, the study of social groupings and institutions, their inter-relations, and the laws of their growth. Even if it is necessary to harness the numerous special sciences concerned with man—economics, biology, psychology, etc.—in order to achieve this end, they do not exhaust the facts which fall within the scope of

Having thus delimited the field of sociology, Professor Ginsberg proceeds to examine more specific issues. He dismisses the alleged divergence between the knowledge of particulars and the knowledge of general laws which is said to distinguish history from sociology, and demonstrates their community of aims, where both rely upon empirical and comparative methods. Not that the dispute is thus finally laid. A case could, I think, be made for sociology as an autonomous discipline (with economics and psychology as its nearest congeners) rigorously limited to the study of living societies over minimum time intervals, and seeking for ultimate laws in human psychology, as opposed to an historical science with the main emphasis on temporal one-way relations, built up secondarily on such a sociology. More controversial is the next essay on 'Social Purpose.' Professor Ginsberg gives a new significance to this much-abused concept; but his contention that "social wholes are . . . organic and conational in the sense that they are wholes " which maintain themselves as such by the efforts " of their parts towards mutual adjustment" could be strongly debated.

The next essay, in which the concept of evolution in sociology is rehabilitated by a very careful consideration of its logical, biological and sociological connotation, is probably the outstanding one in the book. The problem is handled in a constructive and illuminating way, raising it above the tedious bickerings which have hitherto surrounded it. Professor Ginsberg argues convincingly that social change is "totally different in "character" from, but is "far more intelligible than" biological change. It must be sufficient to recommend this essay to anthropologists.

The paper on 'Stages in Social Evolution' is familiar to readers of Man, having appeared here before, and need not therefore be referred to. The two essays dealing with emotion and instinct again touch upon concepts which have played and still play a considerable rôle in social theory. Professor Ginsberg has an unerring eye for the essential points of a contentious problem; but I cannot help feeling that the solution of the instinct problem lies not in the application to it of such insecure concepts as "impulse-feeling" and "conation," borrowed from introspective psychology, but in further neurological and endocrinological work. On the other hand, his suggested restatement of the theory of human motivation in terms of primary needs and specific tendencies seems to me full of possibilities.

The remaining essays deal with more practical matters, not however devoid of methodological implications. Professor Ginsberg discusses the evidence for the inheritance of mental characteristics, demolishes the claims of eugenics by a direct analysis of the relevant sociological and statistical data, and proves, by a personal investigation, that the social ladder in Great Britain "lifts only relatively small numbers" of working class people to the ranks of the middle and upper classes.

M. FORTES.

ASIA.

Der Krieg der alten Dachse. Mündlich vorgetrogen von Kanda Hakuryū. Übersetzt und gekürtzt wiedererzählt von Kurt Meissner. 8½ × 6. 155 x + 109 pp., 10 plates (including 5 coloured), Tökyö: The Kyö Bun Kwan Ginza; and Leipzig: Verlag Asia Major G.m.b.H., 1932.

This folktale, translated and abridged from a Japanese original, is based on the widespread and doubtless very ancient Japanese belief in the magical powers of the tanuki, a word generally rendered badger.' In his interesting preface, however, the translator assures us that the tanuki is not a badger at all, but more like a dog; and certainly the illustrations of the animal, with its long tail, seem to support him. Though the general idea underlying the story is old, the Japanese narrator, who regards it as fact, not fancy, places the actual events in a period less than a century ago and even gives the middle of the 3rd month, 1839, as their initial date; the subsequent episodes extend into the following year.

It would take up too much space to give the plot of the story, but the whole book is a rich mine of folklore about the tanuki. These 'badgers' are funny dogs, with a strong predilection for low comedy and knock-about farce. They play all sorts of practical jokes on mankind, usually harmless ones, though occasionally they can be dangerous. They can make themselves invisible, take human shape and pose as monks or laymen, and converse with people, and they are very wise. Many of them live for hundreds of years; but they are mortal men when they die, their bodies are disposed of by undertakers. They have a future life after death in which loved ones can meet. They are guardians of temples and they have many magic powers. They can possess' a man, entering into him and making him more efficient in his work, or endowing him with the second sight of a soothsayer; but if malevolently disposed they may, by this 'possession,' cause great suffering and even death, for they can bewitch people to their destruction. Their magic powers extend to the 'materialization' of concrete objects, and to their transformation of them into something different: for example, a tanuki in human form sells a man fish which presently turn into stones. They have among themselves a hierarchy, with official ranks, promotion in which is gained by high expertness in playing tricks on mankind. Some are devout Buddhists; and, in old age, they (like the Japanese) retire from active pursuits and lead a meditative life. It is rather an anticlimax to learn that they are afraid of dogs, and that their chief diversion, apart from their monkey tricks, is making music by drumming on their bellies.

The book is well produced, and the illustrations (mostly Japanese) are pleasing. I have noticed the following misprints: On p. x, l. 11, the \$\tilde{u}\$ is omitted from Südheer; p. 7, l. 8, the S from Sie; p. 20, l. 25, for Morgon, read Morgen; p. 23, last line, for geschne, read geschen; p. 37, l. 11, for Möhnen, read Söhnen; p. 67, l. 7, to nieman add a hyphen; p. 86, l. 27, for 207 ten read 207ten. The translator's preface should not be skipped; it is informing sympathetic and humorous; and his playful dedication of the work to his wife is entirely in harmony with the quaintness of the work.

C. O. BLAGDEN.

Twenty Years in Tibet. By David Macdonald. London: Seeley, Service & Co., 1932. 8vo. 156.

Pp. 318. 35 plates. Price, 18s. net.
This book is by a former assistant of the present reviewer, whilst on Younghusband's Lhasa Mission three decades ago, who through acquiring unique proficiency in conversing in the high flown honorific official language of Tibet, as opposed to ordinary colloquial, was appointed British Trade Agent in that land under the treaty concluded by that Mission. His partial consanguinity with the Tibetans, moreover, made him a persona grata with the priest-king, the Dalai Lama, and the Tashi Lama and other high officials, with all of whom he established intimate personal friendly relations. For, though stationed at the midway mart of Gyantse on the great plateau on the Indian trade-route, his duties led him repeatedly to Lhasa. He thus, like Boyle and Manning of old, was enabled to give us an authentic insight into the domestic everyday life of the people, from the Grand Lama downwards, and of the political intrigues and squabbles of the rival factions and the machinations there of the Chinese Republic, with which and feasting and picnics and his own family life the book is mainly made up. therefore, with the settled ordinary life in the post-Mission period, the book supplies an interesting supplement, in simple narrative style, to the much wider, fuller and more historical and permanent records of that Mission in the unrest of our armed invasion at that epoch.

Of the few items of ethnological interest, it is significant to find that the attempt of our Government at introducing some Western civilization into that 'Closed Land,' but no longer the Land of Mystery, by procuring the education of a batch of four of the sons of Tibetan nobles in English public schools—at Harrow and Rugby, and one at Sandhurst for military training—is now reported to have signally failed. Those educated youths, on their return 'completely westernized,' were relegated by the Lamaist priestly rulers to obscurity and given no official position of consequence, except the specialist in electrical engineering, who was

retained by the Dalai Lama to look after his motor car and the lighting plant crected in his palace. Similarly, the industrial school set up at Gyantse in 1923 at the request of the Dalai Lama for the Western education of the sons of Tibetan officials and wealthy landowners, under an English head-master, was finally closed down after only three years by the hostile Lamas, who feared that the Western teaching would undermine their stranglehold on the minds of the younger generation.

Anthropologically, it is noteworthy that the old covenanting custom of sacrificing black yaks and swearing over their carcass is still regularly practised in the appointment of village headmen. So also, as there are no prisons, the inexpensive custom of mutilating and turning loose of criminals still goes on, despite the Grand Lama professing to be the incarnation of the benign Buddha. The old pre-Lamaist devil-worship faith, the Bon, still prevails extensively with many temples; and in the cis-Himalayan Chumbi Valley of Tibet, its black-hatted priests carry the stuffed skin of 'a Tibetan wild-cat' or 'Tiger-Spirit' in their ritualistic processions, as it is traditionally reported that a local king there was killed by it. And divination and oracles are freely in demand from Lamas and astrologers for everyday use. Priest-ridden Tibet still maintains its age-long superstitions and its aloofness from the outside world, having closed again its frontiers to Europeans almost as rigorously as ever, save for the very rare visit still permitted to an accredited British or Russian political official. L. A. WADDELL.

ETHNOLOGY.

Ethnology of Tongareva. By Te Rangi Hiroa
(P. H. Buck). Honolulu, 1932. Bernice P. Bishop Museum, Bulletin 92. 10" × 63".
iv + 225 pp., text-figures and 8 plates.

Although Tongareva is commonly known as Penrhyn Island, it is in reality an atoll which comprises a number of larger and smaller islets ringing the lagoon. population (Polynesian) now numbers about 390, but before European, and especially Peruvian, contacts it probably amounted to about 2,000. The traditional history suggests that Tongareva was settled about the middle of the 15th century, though there is some evidence that it may have been a hundred years earlier. In spite of the changes undergone by the native culture, Dr. Buck has succeeded in producing a coherent account of social organization and material culture; in this work he has been greatly helped by the observations of Lamont, a trader who was marooned on Tongareva in 1853, and who lived with the natives for several years. Dr. Buck's social studies include genealogies, relationship terms, sex-concepts, birth, puberty customs, marriage, myths and religion, and much else. In material culture he covers all the ground, and is especially full on the subjects of dwellings, the utilization of the ecconut, the plaiting of roofs, mats, and baskets, canoes, fishing, and fish-hooks. An interesting feature in the material culture of the atoll is the dependance of the islanders on the coconut-palm, which supplies practically the only vegetable food, whilst fish, shell-fish, and turtle provide the only "meat." A valuable part of Dr. Buck's investigations relates to the maraes, of which he records twenty-four. All are (or were) made of limestone slabs arranged on a rectangular plan, and their uses appear to have been both social and religious. The author corrects some errors that have got into the literature as regards stone circles of the Stonehenge class on Tongareva. Stone circles and ellipses are to be found, but they are much less numerous and important than the maraes; like these, they consist of simple limestone slabs, and the author believes their function to have been accessory to those of the maraes.

Dr. Buck is doing excellent work in his studies of what can still be gleaned of Polynesian culture in the islands themselves, and the Bishop Museum is to be congratulated on its enlistment of an enthusiastic and skilled recruit. But he still calls an adze-head an adze.

H. S. HARRISON.

158 Bulck, S.J.: Wiener Beiträge zur Kulturgeschichte und Linguistik II, edited by Professor W. Koppers. Vienna, 1931. viii + 256 pp.

In recent years the Historical School in Ethnology has moved its spiritual centre from Germany, the country of its origin, to Austria, where the new, inspiring leadership of Father Schmidt gave fresh impulses to its scientific work. The present book, written by one of the younger followers of the Viennese School, prefaced by Professor Koppers of Vienna University, and—above all—dealing with problems of Method of Ethnology, is a convincing example of the fruitful working of cultural-historical ideas in the new "environment," and of the fact that the interest in methodological problems still plays a dominant part in the Historical School. This, at least, is a definite proof against the reproach frequently raised against the Historical School: that it has become to-day but a rigid and almost sterile structure.

It is natural that a methodological work like that of van Bulck will have to deal to a great extent with the formulas laid down in former methodological works. In fact it becomes very often almost a commentary on Graebner's book and the methodological contributions of Schmidt and Koppers. There are many obvious points of a very fruitful criticism in Dr. van Bulck's most interesting work. First of all, against Graebner's limitation to Melanesian material, this book bases its conclusions upon Africa. The different cultural background means very often a difference in matters of principle (e.g., the question of the value of existing historical records, problems of recent migrations and culture contact, etc.). This leads to a refined and much more detailed analysis of the different possibilities of culture contact (e.g., pp. 49, 62, 81, etc.), revising in this way Graebner's abstract and mechanical rules for the historical interpretation of cultural distribution.

On some points Dr. van Bulck goes deeper than this commenting and revising, and tackles basic problems of the cultural Historical School. There is particularly one point which marks a sharp turn in the method of the 'Kulturkreislehre': the strict repudiation of monographs on one cultural element and its distribution, which has characterized so much the Kulturkreis-work up till now. Dr. van Bulck stresses strongly that a single cultural element gains scientific value only if given in its cultural complex (p. 20). Not the existence or non-existence of a cultural element is important, but the question "how it exists, i.e., in what cultural complex" (p. 23). This new attitude certainly gives up much of that comprehensive universality which was characteristic of the Historical School; but on the other hand comes nearer an investigation of the living forces in society than any other work of the Historical School before. However, this "living culture" still has a very limited meaning. "Life of culture," in Dr. van Bulck's book, still means "historical life"; very characteristically Dr. van Bulck rejects the "sceptic" anthropologist, who limits himself to what he finds as actually existing, changing, living culture (p. 39). The facts of actual cultural and social life seem to have not yet acquired the dignity of scientific problems of their own. Ethnology

remains identical with history; "cultural milieu" and historical milieu" are the same (p. 37).

It is but a consequence of this strongly emphasized historical orientation that Dr. van Bulck tries to base anthropological work as far as possible on the safe ground of "real" history. He works so-to-speak backward; he again almost reverses the scope of the "Kultur-kreislehre" taking as starting-point the youngeststratum of cultural events, i.e., facts that are backed by written records, based on direct observation, etc. He breaks up the unit of the "Kulturkreis" into: (1) the geographi-cally limited "Kulturschicht-Kultur-epoche," based upon the definite historical facts, and (2) the proper "Kulturkreis," the comprehensive heuristic-hypothetical unit which has to step in where the historical data fail. The inequality of material and method does not exclude, in his opinion, reliable results; nor does it render impossible the building up of one comprehensive "Real History" which would become far more than mere hypothesis (p. 31). But again "History" is seen under a very special angle. "History" and "Cul-" mean, in fact, but one thing: migration. Dr. van Bulck goes so far in the adoption of this Graebnerian equation as to formulate directly that "cultural elements which have not been distributed by migrations have, " in fact, no right at all to the name 'culture.' " (p. 197.)

Here we lay the finger upon one central difficulty of the whole Kulturkreislehre: the critical ambiguity involved in its scope of culture, being both the comprehensive dynamic unit of the development of mankind and, at the same time, a clear-cut chain of separated historical "strata" or "epochs" of migration. Dr. van Bulek sees quite clearly the methodological problem emerging out of this interplay of dynamic factors and static crosscuttings and auxiliary constructions (p. 240 seq.). agree at once with him when he says that only the dynamic side can form the ultimate subject of Anthropology (p. 239). But, and here I come to the criticism, bound to his equation culture-migration, he never really tackles the dynamic factors in culture. The migrationtackles the dynamic factors in culture. cultures, bringing forth cultural changes, are in fact not dynamic at all: they become effective for the influenced area only by handing over a cultural complex which remained more or less the same. The interrelation between the single Kulturkreise, which Father Schmidt and Koppers have tried to interpret in terms of inner connections, inner driving forces (e.g., linking up the primary cultures—" Urkulturen "—with the subsequent "secondary cultures"), becomes that vacuum again, that it has been in Graebner's book. And, finally, Dr. van Bulck had to fall short of the basic methodological problem, of the causal interpretation of the historically defined subsequence of culture forms. Following the traditional rule of the Kulturkreislehre, cultural elements must not be explained except out of the culture (i.e., the cultural and natural environment) they originated in. But the vicious circle is obvious. For that culture-" whole" that is to define its elements, has been worked out and has been defined itself only by putting together those various elements! And, apart from this, are cultural and natural environment really all that count in giving rise to a new cultural fact? Father Schmidt pointed to the necessity of the study of individuals in a primitive society; van Bulck, adopting this view, wrote down a sentence which I consider as one of the most important in the younger Kulturkreis-literature: we are not allowed to stop at the cultural distribution (Kulturlagerung) or the cultural elements, we must also reckon with the bearer of the culture (Kulturträger) (p. 198). But then he thinks that he exhausted this new factor by stating but three characteristics: language, physical type and racial stock (Stammesangehörigkeit). But, after all, are these "bearers"-or Father Schmidt's creative individuals—not more than this? Have they not got a psychological and socio-psychological habitat we have to reckon with? Instead of including psychology and sociology, the sciences of actual life of men and society, Dr. van Bulck includes archæology and prehistorics; is it not really as if anthropology voluntarily deprived itself of the great asset it has got to work with living material and to draw its knowledge directly from human life? (Thurnwald). To put it quite generally: only if psychological and sociological investigations can be included can a historical connection, however well proved as it might be, be interpreted in terms of causality.

Whether investigations of this sort, carried through among the Primitives of to-day, can still be applied to elucidate those far-reaching historical reconstructions (as I should strongly maintain), we leave here aside. But, however this may be, they cannot be eliminated. And they do not exist as a scientific scope outside historical views; they certainly must rise from within, if anthropology is not to remain limited to museum-data or distribution-maps, but to try to approach, as is taught in Father Schmidt's School, the very life of culture and its "bearers." There is no doubt that, altogether, Dr. van Bulck's book marks a most important step S. F. NADEL. towards this objective.

N. AMERICA. Forty-Sixth Annual Report of the Bureau of American Ethnology, 1928-29. Washington: Washington:

The title-page of this volume gives little indication of its contents. These consist of the Report, occupying 16 pages, an 'Anthropological Survey in Alaska, Ales Hrdlicka, occupying 350 pages, and 'Indian 'Tribes of the Upper Missouri,' by Edwin Thompson Denig, occupying 250 pages. Each of the two 'accompanying papers' would have formed a volume of more than average size if they had been published

separately

Dr. Hrdlicka presents the results of a four months' expedition to Alaska which he undertook in 1926 for the purpose of collecting data relating to the surviving Indians and Eskimo old settlements, migrations and skeletal and archeological material. The narrative of the expedition, which started on the north-west coast and travelled up the River Yukon, is given first. This is followed by a general account of the localities visited, and later sections are devoted to the archeology of Central Alaska, to the anthropological characters of the living Yukon Indians and to the sparse skeletal material available. There are fewer than twenty crania of this type which could be studied, though Yukon Eskimo specimens are rather more plentiful. western Eskimo region is next described from an archeological aspect and a detailed historical account is given of discovery in these parts. The living population of the area has been described by several explorers, whose accounts are quoted, but before 1926 no measurements of any importance had been published. Several series were measured under Dr. Hrdlička's directions, and the means for these are given, there being 124 males and 84 females represented in all. The cranial material for the western Eskimo is far more abundant. Data relating to 450 adult skulls are compared with those for nearly 850 Eskimo specimens from other localities, and all this material is preserved in American museums. The means for different groups are alone presented here, though many of the individual measurements have been published elsewhere. The number of measurements considered is small and much useful work remains to be done on these splendid collections. The mandibles and other bones of the skeleton are dealt with in the same way. In conclusion the different theories that have been advanced regarding the origin and antiquity of the Eskimo are discussed in detail. The most important conclusion reached is that there are fundamental somatic relations between the western Eskimo and the neighbouring Indians and this is interpreted to mean that the two branches are root members of the same

In 1847 an Act of Congress allocated five thousand dollars for the purpose of encouraging investigations relating to the Indian tribes of the United States. circular was prepared of 'Inquiries, Respecting the 'History, Present Condition, and Future Prospects' of the native peoples, and Edwin Thompson Denig returned detailed answers relating to the tribes of the Upper Missouri. He had lived for twenty-one years among these prairie tribes. The manuscript was finished about the year 1854 and it is now published for the first time. A slight re-arrangement of the material was undertaken by the editor (J. N. B. Hewitt), and he provides a biographical sketch of Denig. The arrangement of the inquiry was very similar to that which is adopted by many modern anthropologists who set out to give something approaching a complete description of the culture of a primitive people. The topics dealt with cover history, geography and all forms of the government, customs, beliefs and material culture of the Assiniboin. No attempt was made by the editor to verify the statements made, but this is obviously a valuable record of a primitive stage of civilization which had not been greatly modified by European influences at the time when this description was written. The author's pen sketches and a drawing are reproduced and there are photographs of Denig and his Assiniboin wife. All the illustrations in this volume are effective, but it would have been an adventage if the Indians and Eskimo in Dr. Hrdlička's memoir had been photographed in standardized positions. G. M. M. standardized positions.

The Changing Culture of an Indian Tribe. By
Margaret Mead. Columbia University Press,
1932. \$4.50.

For more than two centuries Western civilization has impinged with increasing violence on simpler societies. Nearly everywhere it has disrupted the social and economic life of the indigenous peoples and pro-pounded a series of bewildering problems to its victims and to those responsible for the administration of their territory. As Dr. Mead says: "The isolated, untouched human society, secure in its own mores, with political, social and religious structures neatly dovetailing into a secure economic base, is becoming more and more of an anomaly." The relations of the native peoples of the western United States to their white supplanters have differed in many ways from conditions in many British territories. This has been particularly associated with the rapidity of the white expansion and settlement since the latter part of the nineteenth century and with the failure to provide any economic function for the Indian in the communities which so rapidly dis-placed his own. Unlike the negro peoples of South Africa, the Indian has nowhere been effectively drawn into the orbit of Western exploitation. But, on the other hand, the dispossession and extermination of the native population has been less ruthless than that of the Australians and Tasmanians in earlier days. In many areas the Indians were given rights over territories which rapidly became valuable property in American eyes, and so gave them opportunity to acquire white man's wealth without any of his standards of value.

Nowhere has the disintegration of native life and the confused results of abrupt domination by alien culture developed on so large and tragic a scale as in the Great Plains. With the extinction of the buffalo in the 'eighties the economic basis of the remarkable Plains culture was destroyed and, shortly after, the advance of American settlement began to dispossess the Indian of his lands. The American Government made sporadic attempts to provide for the welfare of the survivors of the Indian wars and the epidemics of smallpox and measles by allotting large tracts of territory as reservations and providing some materials for the transformation of these people into cultivating and cattle-raising homesteaders on the Western American pattern. But time and economic pressure were everywhere against them. The values of the husbandmen were entirely foreign to these buffalo hunters and horse raiders. They snatched at chances to lease and sell their lands to whites and so gain money to buy materials for ceremonies, ostentation and extravagant hospitality in which they recaptured some of the joy of earlier days. Land and dollars had too often little further value.

Dr. Mead's book is a study of the maladjusted culture of a southern Plains tribe, referred to under the pseudonym Antlers, after this disintegration and the attempts to mitigate its effects had proceeded for nearly half a century. Based on field work undertaken in 1930 it is written in the vivid manner we have learned to expect in her work. In an introduction in which she surveys the difficulties of elucidating valid generalizations from the study of culture in violent transition she nevertheless shows the great importance to both the ethnographer and the sociologist of investigating the results of these extreme examples of diffusion and culture change. After a general survey which summarizes the relations of present conditions to the aboriginal culture and to the particular influences and pressure to which it has been subjected, the position of the women, especially in relation to marriage and delinquency, is considered in greater detail with case histories and the tabulation of data. Apart from the analysis of conditions in this particular group her data on social organisation, religion, marriage and the household provide a wealth of examples of processes which are proving to be characteristic consequences of abrupt C. D. F. culture contacts in many different areas.

LINGUISTICS.

Yamana-English: A Dictionary of the Speech of

Tierra del Fuego. By the Reverend Thomas
Bridges, Superintendent of the South American
Missionary Society in Tierra del Fuego from
1870 to 1887. Edited by Dr. Ferdinand Hestermann and
Dr. Martin Gusinde. xxiv + 664 pp. Printed for
Private Circulation only.

Thomas Bridges was a remarkable man, and his 'Yahgan' or Yamana Dictionary, now published, witnesses alike to his painstaking labours and to his

natural ability.

He was adopted and taken out to South America by the Rev. G. Packenham Despard, who went out in 1854 to re-start the Fuegian Mission, after the tragic death of Captain Allen Gardiner. Five years later, Despard returned to England. Bridges, now a youth of eighteen, remained behind at his own earnest request to live and labour among the Yahgans. He continued, with scarcely a break, for over forty years in Tierra del Fuego.

Beginning as a child, he acquired a perfect speaking knowledge of the language. During the next twenty years, he collected over 30,000 words, carefully defining each term and noting the various shades of meaning. His task was completed in 1879. For fifty years this unique work has remained in manuscript form. Thanks to the generosity of his children, and the excellent editorial work of Dr. Ferdinand Hestermann and Dr. Martin Gusinde, Bridge's Dictionary is now available

in permanent form.

The Yahgan terms have been transcribed from an obsolete to a modern system of spelling, but the editors were not allowed to alter the original arrangement or words of the text. This will, at times, puzzle the student, for Bridges frequently made use of native words in definition, written without italics and in old-time spelling. To take an easy example of la-, repetition. lay-ua To ua or yooa too or with others. lay-auasana To yowasana too.

Something of the general plan of the dictionary and the character of the words embodied in it can be obtained from Mr. W. S. Barclay's admirable preface. This would have been greatly enhanced if, in addition to Bridge's own notes, it had included a few specimen nouns and verbs with their pronominal inflections, and at least one verb with all its possible meanings obtained by affixes.

The value of the dictionary consists in its completeness and its wealth of detail in defining each term. number of words will not excite the expert, though the idea persists, even among cultured people, that savages have few words and no grammar. It contains the names of objects that interest them, and the ideas that they entertain. Kinship terms abound; they have distinct words for fish and its shell, tree and its leaf, different kinds of hair, numerous fungi, even duplicate words for various objects. Many verbs have a specific use, e.g., to lend a canoe, escape by diving, drift away in a boat, shape a stick, say in fun, and many others touching their own life and circumstances. Bridges included many of the participles, and many verbal compounds, modified by prefix or suffix to differentiate its meanings. He calls attention to verbs with singular and plural ideas, and to a class of reflexive verbs, where the action falls on another person.

In my study of the Lengua-Mascoy of the Chaco Boreal, I found about 500 simple verbal notions, such as ma, have, hold (figure of the hand), and pawa, sound (utter a voice), capable, if required, of bearing nearly one hundred modifications or extensions of meaning.

These verbs fall into three categories (1) natural action. as hold, give voice; (2) action by another (person or instrument), as give, play an instrument; (3) action on behalf of another or on something belonging to another, as hold another's child, play on another's instrument. Each of these three sets have sixteen regular modifying particles; each of these again can take an intensive and a kind of comparative form.

Again, in Lengua-Mascoy, nearly all verbs possess an inherent notion of singularity or plurality, not to be confused with pronominal number, as one runs, many run; to kill one, to murder many. This is obtained sometimes by a prefix or internal change, sometimes by the use of a different word as in pen-ken, put one; nen $k\bar{s}n$, put many. Note p has a masculine and n a feminine significance throughout the language. This father and mother influence may explain what Bridges regarded as

so unusual in the Yahgan tongue.

The Yahgan word ila-yella (to build for temporary use; to build and leave) is worthy of note. The contrast between the past and permanent and the present and temporary is very pronounced in the Chaco tongues, and shows itself not only in permanent tense forms, but in distinct words such as denote 'a permanent home' or 'a temporary dwelling,' 'an old custom' or 'a newfangled way.'

There are, doubtless, many other affinities between the Yamana of Fuegia and the languages of the Gran Chaco tribes, but these strike the eye after a somewhat cursory examination of this exhaustive collection of the words that enshrine the thoughts and indicate the occupations of men and women, who 'are generally quoted as a 'people on the lowest round of the ladder of culture.'
R. J. HUNT.

MISCELLANEOUS.

A Scheme of Babylonian Chronology. Macnaughton. London (Luzac), 1930. Price 7s. 6d.

The author writes, as he says, "with the con"fidence of ignorance," but he has consulted reputable authorities for the facts and recent calculations. His argument is not always easy to follow, for he allows himself to discuss, by the way, the relations between the Sumerian language and the Austrian (pp. 43-51), the astrology of Babylonia (pp. 78-88) and a number of problems of Egyptian history. J. L. M.

CORRESPONDENCE.

Some Further Notes on Momiyai.

Sin,—Since writing my previous notes on Momiyai (Man, 1929, 160), I have obtained the following information on the subject, which, together with the former article, should make a fairly complete survey of the subject. Though it seems a common misconception, it does not appear that mummy or mummie have any true connection with momiyai. mummy is translated as Jussatun Muhannatatun, while momiyai is called Araq-ul-Jibal (the Sweat of

Mountains).
'Ghiasul-Lughat,' a well-known Persian dictionary, gives the meaning of momiyai as follows: Momiyai is a black viscous thing. It is of two kinds, mineral and artificial; artificially it is prepared as follows. A child with a red face and red hair is kidnapped while quite young, and is kept till the age of thirty, when he is put upright in a large earthenware pot filled with honey and certain drugs, and the mouth of the pot is closed. The history of the man is inscribed on the outer surface of the vessel. It is allowed to remain in this condition for one hundred and twenty years, after which it is

opened, and whatever may be remaining of the man and the honey is momiyai.

The Persian dictionaries, 'Madar' and 'Kashaf' favour the idea that Yai is the name of a village in Persia. Near that village, they say, there is a tank in a mountain, where once every year or so a fountain springs up and boils in the tank and a substance like Men officially fat or wax is condensed on its sides. appointed collect this wax and take it to their king. It is therefore called mom-i-yai, or the Wax of Yai. In 'Kashaf' it is also stated that a brass sieve is attached to the mouth of the spring, and after a year

it is removed and the momiyal collected from it.

The authors of 'Burhan' and 'Rashidi' assert that the word momiyai was originally Mom-Aiu (like wax), because the mineral momiyai, when dug up, looked like wax; and that the word from frequent use came to be pronounced momiyai.

The story of its discovery is related as follows in a book of native medicines called 'Makhzan-i-Adwya.'

In ancient times, Fridun, a Persian ruler, happened to be out hunting in the mountains. His arrow struck

a mountain goat and wounded it. His men ran after it, but the goat disappeared in some caves nearby. Next day they were again out on a hunting expedition, and met the same goat, apparently quite unhurt, with the arrow still sticking in its side. They saw that there was something smeared on the wound, but did not take much notice of it at the time. A few days later the ruler again chanced to wound a deer and chased it for some distance, when he lost its trail. A few minutes later he saw the same deer with the arrow pierced across its ribs, running strongly as if nothing had happened. Something black was seen on the wounded part. The king, curiosity being provoked by this strange sight, ordered his men to search round for the source of this black specific, and on searching they found a black liquid leaking out of a rock. Trial being made, it was found that it would cure and heal up broken limbs and wounds. From that time the place was guarded by men appointed by the Government.

That the belief in momiyai can be exploited with success is illustrated by an account given me by Colonel H. L. Haughton. The tale is as follows: A man came over the Babusar Pass to the Chilas side within the Gilgit Agency on a shooting trip. It is possible that he may have abused or ill-treated his coolies; whatever may have been the cause, they intended to get their own back on him for something. This they did by deserting him, spreading a rumour that he had come to kidnap babies to extract momiyai from their brains. In consequence of this, the whole countryside boycotted him, and he was able to get neither labour nor food nor anything else. He appealed to the A.P.A. Chilas, and, on condition that he returned immediately to Kashmir, he was provided with coolies and was forced to abandon D. H. GORDON. his trip.

Origin of Cruelty.

SIR,-I have been interested in the letters which have appeared in your publication on the origin of cruelty,' Man, 1932, 219, 220, 292, and would like to submit another possibility.

The opinion seems to be that cruelty as it exists in man must have some other origin than the instinctive 'fighting' activities of the lower animals. Cruelty is thought to be more marked among human beings than among other animals, and especially to be more deliberate. The fighting activities of the lower animals are explained as incidental to the procurement of a food supply, or of a mate, or for protection of life, and as not extending beyond this except only to a negligible degree.

The deliberate nature of human cruelty seems to me

doubtful indication that man is more cruel than other animals. Many, if not most, of man's acts are perhaps more deliberate than are those of the lower animals, because he acts to a greater degree from reason than they do. This is just one of the things which marks him as man.

We find in savage society-and, indeed, in civilized society—what we might call a dual attitude toward evil. By evil I mean any disaster, sickness, storm, defeat, death, malformation, etc., etc. Savage man's attitude toward such phenomena is that they may be the acts of supernatural beings. Sometimes he regards them as the acts of a good being, with friendly intentions toward mankind, or that particular portion of mankind in question. At other times, he regards them as the acts of a malignant being, with hostile intentions. There appears to be no clear dividing line between the two sorts of beings; the gods of one community may be the demons of another, and the gods of one generation may become the demons of a later time. But though the two estimates merge into one another, and may even co-exist in the attitude toward a single one of these supposed beings, still they are opposed attitudes, and they affect in opposite ways savage man's conception of evil.

So long as evil is considered as the act of a good being, so long it will be accepted, for the savage values such evil occurrences as warning communications from these beings, intended to correct him, and turn him from some harmful activity. Disaster is seen as a 'sign' that things are going wrong, that the whole community or some member of it is behaving in such a way as to produce greater disaster, if the sign is not heeded. This submission to the supposed will of supernatural beings, which includes the acceptance of evil, assumes that no harm can come from such a being, and that man may be grateful for evil at the hands of such a being, for it is a warning against greater evil.

But when the evil lasts long, or is general, or when it

seems particularly unjust, it may produce revolt. Man may begin to doubt the friendliness and goodness of a being who metos out constantly a large share of evil, and a small share of benefit. When this occurs, man ceases to accept evil. On the contrary, he rejects it, and seeks by all means to prevent it, and to outwit, overpower, and punish the being who has treated him

Both these attitudes, it seems, might stimulate human cruelty, but the acceptance of evil would appear as particularly suited for this purpose, for man's sub-mission to the 'will of the gods' may go even further than an acceptance of evil, and may extend to an attempt at imitation.

At all times in human history, perhaps, one of the influences in the formation of human character has been this imitation of a supposedly good deity. Even Christian theology has its 'Imitation of Christ,' and the plea to the gods is always, 'May I be like you!'

Nietzsche has remarked that "Man fashions the gods

"in his own image," and certainly there appears to be much of man in man's conception of the gods. But that is not the only element. The conception of the gods also includes those forces of external nature with which man has to deal-the good things such as favourable weather, plenty, health, and victory, but also the bad things such as drought, plague, storm, famine, failure, and death. All those things furnish clues to man as to the possible nature of the gods. Even other animal species and plant life supply additional evidence, since these things are believed to have been 'made' by the gods, and sometimes specially 'sent' to man for his instruction, reward, or punishment. Beasts of prey, venomous snakes, biting insects, stinging nettles, poisonous fruits—these too, may furnish clues to the nature of the gods. Even in modern times we have William Blake pondering as to 'what dread hand' may have made the tiger, and inferring the nature of God from this member of the cat family.

Thus, some of the cruel acts of the savage might be attempts to act 'like the gods' in much the same way that a big sister will hit her small brother because she has seen her mother do this, and supposes that it is a

good way to behave.

Any individual in trouble in a savage community may be further ill-treated by his fellow men, if his trouble is thought to be punishment for wrong doing. These instances of ill-treatment appear to us as instances of wanton cruelty, not necessary to the procurement of a food supply, or of a mate, or for the protection of life. Yet it is easy to see that the savage might consider them as necessary, for he believes that if one of his community displeases the gods, the entire food supply may be cut off, or the whole group wiped out with plague.

ELIZABETH LANCASTER.



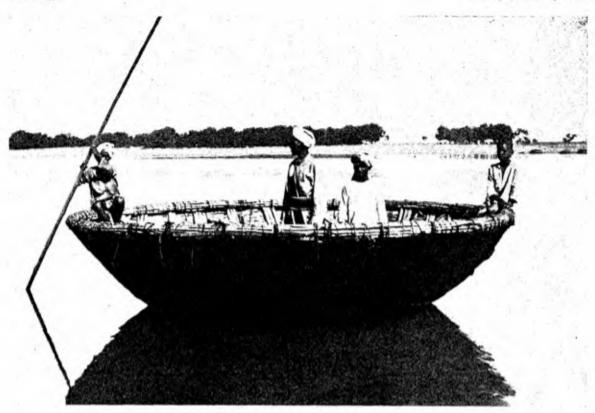


Fig. 1. PERRY CORACLE ON THE TUNGABHADRA RIVER, KURNUL.



Fig. 2. Coracles at the anagundi ferby, tungabhadra river.

THE CORACLES OF SOUTH INDIA.

Photographs by J. Hornell.

MAN

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ORIGINAL ARTICLES.

With Plate N.

S. India: Technology.

The Coracles of South India. By James Hornell.

Hornell.

Coracles are still employed extensively on the rivers Cauveri, Bhavani and Coleroon in the Coimbatore and Tanjore districts of South India, and on the Tungabhadra, which forms part of the boundary on the south between British India and the State of Hyderabad. Within the limits of their distribution they are used exclusively for water transport; neither canoes nor boats are to be found there. References to their existence are numerous, but no account of the details of construction appears to be on record. The following notes, made in 1918–1920, although by no means exhaustive, will therefore go some way to fill this lacuna in our knowledge of these primitive craft.

The Indian species, if classification on the zoological system be allowed, differs in its form from those of Iraq, Wales and Ireland. The Indian form is either saucer- or bowl-shaped and therefore is circular in plan¹ with the greatest diameter across the mouth. The Iraq coracle, also circular, has convexly curved sides whereby the diameter of the mouth becomes less than that at the equator. More distantly related are the Welsh and the Irish forms, for both are bilaterally symmetric, the latter becoming actually boat-shaped. Ireland is the only locality where coracles are used in the open sea.

Indian coracles are found in three varietal forms, characteristic of three separate areas:-

(a), Coimbatore, (b) the upper and (c) the lower reaches respectively of the Tungabhadra River. All are, however, of the same fundamental type, differing merely in size and those details of construction which are necessitated by the differing purposes to which they are put and by differences in environment.

(a) The Coracles of Coimbatore and Tanjore.—These are the simplest in construction and include the smallest in size. At the present time they are used mainly on the Pykara, the Bhavani and the upper reaches of the Cauveri by fishermen. The size is small, the average diameter being between five and six feet. A single fisherman is the most the craft can comfortably accommodate, but shift can be made to carry a passenger, and on the Pykara, a mountain stream issuing from the Nilgiri Hills and famous for its fishing, European fly-fishers often make use of these shallow-draft coracles to get from pool to pool.

In form this kind of coracle is circular and saucer-shaped, flat on the bottom and very shallow, for the streams navigated carry little water in many places. The framework is built up of long

in plan with the corners rounded. The length of a typical one which was measured was $7\frac{1}{2}$ ft. long by $6\frac{1}{2}$ ft. wide, the depth being two feet. In construction this local variation is similar to those of the typical circular form.—J. H.

As there is no rule without its exception, so even the circular form of the Indian coracle is departed from in one instance. From an old note which was overlooked, I find that at some fishing villages on the Cauveri River, near Kollegal, the coracles in use are quadrilateral

lengths of split-bamboo, woven on the bottom into a stout meshwork. This is made up of three elements, of which the units are each composed of two twin lengths of split bamboo. One element, the vertical one, crosses from one side to the other, its units spaced parallel and from three to three inches and a half apart. The other two, the opposed diagonal elements, cross the bottom obliquely, one from S.E. to N.W. and the other from S.W. to N.E. The units of each are spaced apart from three to four inches and as they cross the vertical units at an angle of from 28 to 30 degrees from the horizontal, woven alternately over and under the units crossed, the result is open basketwork, with a hexagonal mesh of about three inches in diameter. The sides are formed of a deep circumferential band of split bamboo, woven under and over the upcurved ends of the three sets of elements used in weaving the bottom (Fig. 3). To keep the sides rigid, the structure of the frame is strengthened by the addition of a stout cylindrical fascine of thin unsplit bamboos, tied circumferentially around the mouth on its inner aspect; this forms in effect a rude gunwale. When the framework is completed, ox-hide is stretched over the outside and made fast by numerous bindings to the stout gunwale. Finally, a short length of stout pole, about eighteen inches long, is secured by loops across one side of the bottom; upon this the fisherman squats when paddling; it also serves as a supporting bar when he carries the coracle about on his shoulders. After each period of use these coracles are lifted from the water and leaned up against a wall to dry.

The paddle (thuduppu) used is short-handled, the blade broad and spathulate.

Sir Frederick A. Nicholson informs me that about 45 years ago he travelled in a larger one from Bhavani to Erode; at that time road-metal and other heavy goods were normally transported from the interior to the plains of Tanjore by the same means. To-day the employment of coracles is greatly curtailed, but even so, they are still used occasionally for ferrying people and goods across the Cauveri. At the beginning of this century some of the students attending Kumbakonam College regularly crossed the river to college in a wicker coracle. Some of these ferry coracles were of considerable size and were able to accommodate as many as 20 persons, squatting down in a circular bunch and huddled together as closely as possible.

(b) The Tungabhadra Coracles.—These are of two varieties, both used mainly for ferry purposes.
One, the lighter, is used on the upper reaches, the other the stouter and larger, for work at and around

Kurnul, further down stream.

1. The lighter kind was seen at the Anagundi Ferry, near Hampi and the ruins of the once-mighty city of Vijayanagar. The form is deeper than the Bhavani type, the bottom being so convex that it is definitely bowl-shaped. The framework of the bottom, as at Bhavani, is openwork basketry, with large hexagonal meshes, but instead of the units of each element being formed of two lengths of split bamboo, each is usually composed of three unsplit bamboos or canes laid parallel; the sides and gunwale fascine are similar to, but stouter than the Bhavani type.

An additional feature, introduced to give the greater strength needed owing to increase in dimensions, is the employment of a considerable number of curved ribs of stout unsplit bamboo crossing the interior from side to side. Each is kept in place by being laced in and out of the basal basketry; the upper part towards each end is secured by cord or by hide thongs to the warp elements of the woven sides; both extremities are inserted in the angle between the marginal fascine and the

inner edge of the sides.

The exterior is covered with hide which is not, however, reflected over the gunwale, around which pass the cords or thongs which secure the margin of the hide cover.

The paddle used has a fairly long handle, the blade spathulate.

The ferry is maintained by a number of coracles, each between ten and eleven feet in diameter.

As seen in Plate N, Fig. 2, these coracles are able to transport quite a considerable cargo.

2. The Kurnul Coracles are the largest and finest in India. They range between ten and fourteen feet (observed) in greatest diameter, which, as usual, is at the gunwale; the depth is from three to three feet and a half. In shape they are sharply convex, as seen in Plate N, Fig. 1. Great numbers are in use at the Kurnul ferry, for here is one of the main arteries of country traffic into Hyderabad State. On one occasion I counted thirty-six in sight from one spot; at the water gate whence the ferry starts, four were in the water taking aboard passengers and cargo, five were overturned under-

going periodical treatment, and most of the remainder lay overturned on the opposite bank like

gigantic mushrooms emerging from the sand.

The largest are said to be capable of transporting 50 men or 40 bags of grain. A fully-equipped 12-pounder gun is also known to have been carried across in one of these coracles. An ordinary sized one which I saw arrive from the other side, conveyed 22 passengers and a large quantity of goods—piles of chatties (earthenware pots), baskets of vegetables and queer bundles of one knows not what.

The framework is more carefully constructed than either of those already described. Instead of having but one basketwork framing, two are present—a main or inner series of stout bamboo laths, usually in threes, woven in open basketwork fashion, and an outer one of weaker laths in

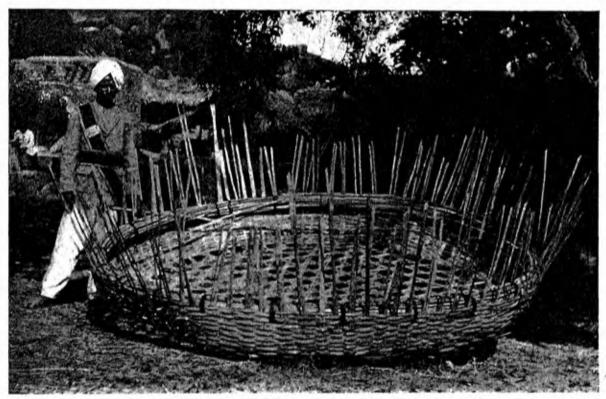


FIG. 3. FRAMEWORK OF A CORACLE IN CONSTRUCTION, RIVER BHAVANI.

pairs, so arranged as to cross the large hexagon meshes of the inner series. Stated otherwise, the frame consists of an inner series of triple bamboo bands, the equivalent of the curved ribs of unsplit bamboos in the Anagundi variety, woven in three directions, so as to form a hexagonal meshwork, with a similar series of double and lighter bands outside of the first and alternate with them. The gunwale is of the usual type. For a depth of about two feet below the gunwale, the side of the coracle is strengthened by a system of circumferential bands of split bamboo woven into the framework (Fig. 3).

The outer surface is covered with a carefully shaped envelope of hide, the pieces sewn together with precision and all holes covered with patches. The edges of the hide cover are not reflected over the gunwale; they come just to its lower edge and are tied to it by closely placed sets of leather

thongs.

These coracles are punted as well as paddled. In shallow water a long bamboo quant is used, but in deep water the orthodox paddle is brought into service; the handle is short and cylindrical,

the blade oblong with the sides parallel. The blade varies somewhat in the form of its end and shoulders; in some they are rounded, in others angular; there seems to be no fixed pattern; so long as the blade and handle are of workable proportions, the details of pattern are not heeded.

The paddler works in a kneeling position at the side of the coracle facing the point he aims to reach. His knees rest against the coracle just below the gunwale, with a cloth between as a pad, while his bare feet are planted upon a horizontal bar suspended from the gunwale by a cord at each end. When the coracle is light a large stone is placed on the bottom as ballast.

To prevent the hide cover from rotting the coracle is brought ashore periodically, turned upside down, and then smeared with an infusion made by grinding up in water the leaves of a shrub

or tree called Pobbākkū. This keeps the leather supple and hinders decay.

Elaborate ceremonies attend the launching of a new coracle at Kurnul. After being well cleaned it is placed close to the margin of the river. A particular spot on the outer side is ornamented with ten alternate stripes of red powder (kunkumam) and yellow turmeric, each being two or three inches long by half an inch wide. These five double stripes are said to represent respectively the crocodile, the small water tortoise (tāmbelu), the big water tortoise, Gangamma the river goddess, and, lastly, the coracle itself. One or two feet in front of the coracle are next placed the following: A small mud figure of a crocodile, another of a coracle and five small conical heaps of wet sand, representing Gangamma. All are adorned with dots of ground turmeric and red powder. A garland of flowers is hung around the smeared lines on the coracle and a similar one round the mud figures and heaps of sand. A small pile of freshly-boiled rice laid upon a leaf is placed in front of the coracle and a similar heap in front of the mud figures. Upon each heap those who officiate pour a small quantity of ghee and place on each an onion and a little jaggery. Near each rice heap is also placed a pot full of toddy and some plantains. Two small lamps are shaped out of wheat-flour dough; in each is placed a wick immersed in ghee. One is laid before each heap of rice. When all has been arranged in this manner, frankincense (sambrani) is burned; a coconut is broken, the flesh extracted and broken into pieces which are put upon the rice heaps.

Lastly, a sheep is sacrificed and a small quantity of the blood sprinkled on the rice heaps. The people then prostrate themselves before the coracle; afterwards they light the two dough lamps and launch them down-stream on a small raft made of cholam stalks. The ceremony ends with the casting into the river in succession of the rice heaps, the mud figures and the five heaps of sand. When the

last of the offerings disappears the coracle is launched.

An identical ceremony is repeated at the end of the ferry season, and also again when it reopens. These large Kurnul coracles are comparatively expensive to construct; in 1918 the price varied from 100 to 150 rupees (£7 10 0 to £12 15 0) according to size and quality.

So numerous were the Tungabhadra coracles in former times that the Vijayanagar Rajas regularly assembled a fleet of them whenever their campaigning required the crossing of this river (Sewell in *A Forgotten Empire*; London, 1900). In modern times railway engineers find them useful whenever repairs are required to the piers of the bridge spanning the river near by.

Coracles have their own especial virtues for ferry purposes. They are, indeed, superior to ordinary boats. In practice a boat crosses a swift stream very obliquely, often landing a long way down-stream from its point of departure; the coracle in skilled hands goes nearly straight across without great exertion on the part of the ferryman.

In Telugu a coracle is termed argīlī; a paddle, theddu; in Tamil the respective terms are parisil and thuduppu.

JAMES HORNELL.

New Britain: Archæology.

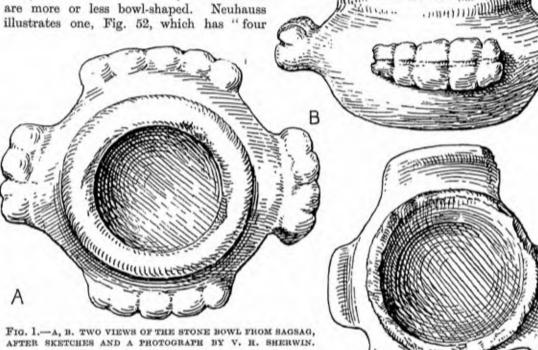
A Stone Bowl from New Britain. By Rev. V. H. Sherwin and A. C. Haddon, F.R.S.

166 Early in 1932 I found an ancient, somewhat water-worn, stone bowl in the bed of the Gima river near my house at Sagsag, in the extreme west of New Britain. The oldest men have no recollection of any similar or analogous object, and therefore have no name for it. The bowl is roughly circular with a rounded base and has a distinct rim round the mouth. Four handles project horizontally from the sides at more or less equal distances apart; two opposite handles consist of five bosses and the other two have four bosses; a central horizontal groove runs across the outward

faces of the bosses. It measures 12 by 10 inches (30.5 by 25.4 cm.); the diameter of the mouth is 6 inches (15.2 cm.); the weight is about 80 lbs. or less. (V. H. S.)

R. Neuhauss (Deutsch-Neu-Guinea, I, Berlin, 1911, pp. 136ff., Figs. 51-53) records fifteen stone bowls or mortars from the neighbourhood of Huon Gulf, most were found inland west of the Sattelberg. He found one in the village square of the little village of Ago, on the coast between Finsch Harbour and Cape King William [apparently not far from Bummin]. Another was found embedded 30 cm. deep in the bed of a small stream at Logaueng, south of Langemak Bay, near Finsch Harbour, in the territory of the Jabim, and one at Taminugetu, a colony from Tami Island,

at Cape Gerhards on the north coast of Huon Gulf, in the Bukaua district; most of them



C. STONE BOWL FROM HUON PENINSULA, ABOUT 26.5 BY 32 CM., AFTER NEUHAUSS, 1911, FIG. 52.

" well-defined wing-shaped projections." This is very similar to Sherwin's bowl, but the handles are not so

symmetrical and there are no bosses. Two mortars were associated with stone pestles, of which several have been found. "Some of the mortars [Tröge] are composed of lava, which points to the fact that " some were imported from New Britain, since lava is not yet known in Kaiser-Wilhelmsland. In the case " of the mortars found in the coastal regions this can be explained. The extremely heavy piece with the " pestle (Fig. 51), however, came from a village which lies twelve hours' journey from the coast. Many " other mortars were found from eight to ten hours' journey from the Sattelberg and it is hardly " likely that such heavy burdens had been carried so far inland in such extremely wild country." He points out that as some recent volcanic rocks are found in the vicinity of Mount Cromwell, it is not unlikely that lava will be found in the interior. "Besides the stone mortars other objects collected " by me point to a population with unknown customs and artistic objects." Neuhauss describes various stone objects, including stone spatulas with human representations carved on the handles. The natives use the mortars as water troughs for their pigs, but they certainly were not made for this purpose, and the natives do not know anything about them. They now employ the pestles for taro magic and other objects are used as pig-market charms.

"Discoveries made at Logaueng, south of Finsch Harbour, indicate perhaps the presence of former inhabitants. In the memory of man no natives have inhabited the place, which is about 250 m. above sea level. During the excavations there were found richly decorated potsherds, splinters of obsidian, old stone axe heads and some crudely worked small stones similar to those now used as charms; here was also found the stone mortar (p. 137) in the bed of a river. The decoration of the sherds (Fig. 62) is very different from that on pots of recent make and is particularly striking on account of its high relief and frequently recurring curves [Girlanden]" (p. 145).

The association of prehistoric pottery with stone mortars is interesting and has been noted by E. W. P. Chinnery ('Stone-work and Goldfields in British New Guinea,' J.R.A.I., XLIX, 1919, pp. 271–291), who alludes to all the stone objects that had been found in New Guinea up to that time. A record of all the finds of prehistoric pottery in Papua (British New Guinea) will be found in Man,

1932, 136.

Neuhauss (Zeitsch. für Ethnol., XLIV, 1912, p. 409) records that Bamler sent to Berlin fragments of pottery and stone implements found on Umboi (Rook Island) in a lonely part of the bush at about 25 cm. below the surface. The stone objects were mostly of lava and consisted of a pestle, a spherical stone head of a club with incomplete boring, fragments of disc clubs; they were mostly much weathered and therefore very ancient and certainly belonged to a previous population, so many traces of which Neuhauss found in the adjacent part of New Guinea. In a later note (L.c. XLVI, 1914, p. 529) Neuhauss illustrates (Fig. 1) a large carved block of stone, 5–6 kbm. found by Bamler near Mbarim on Umboi; this, Neuhauss says, is the first record of rock-carving from New Guinea or the neighbouring islands. "The very crude representations have no resemblance to present-day "Papuan art-forms."

The natives say the carved stone was made by the Manu, a legendary, small people from whom the Cockatoo dances are supposed to have come. To them also are attributed the gigantic stone mortars (l.c. Fig. 2), of which there are not a few on Umboi. There is said to have been a stone of this type with five cups. "Stone mortars have been known for some time in New Britain; I first reported them for New Guinea in 1909. Obviously they were used for grinding crops (Feldfruchten), for occasionally pestles were found which fitted exactly into the cups of the mortars. The spherical stone which lies on the mortar in Fig. 2 may be regarded as a pestle. The present population know

" absolutely nothing about these relics of a vanished culture."

A. B. Deacon (Malekula, London, 1933, p. 627) was informed that Nevinbumbaau, who is an important woman in the mythology of Malekula in the New Hebrides, went to Tomman island and there saw Ambat making a pudding in a stone with four handles (a kind of vessel not known to-day), this she managed to steal from him, but he pursued her and recovered his property. One myth says that she was the wife of Ambat Malondr and, though a woman, was the first person to make a Nimangki fire, and that she was also associated with a high grade of the Nalawan. No living women have any connection with these cult-societies. She is the 'totem' of Nemep village and is connected with the magic of house-building. According to one myth, she caught five Ambat brothers in a pit. In the very sacred Nevinbur rites she appears as the mother of Mansip's two wives and the whirring of the bullroarer is said to be her voice crooning her son Sasndaliep to sleep. Qat of the Banks Islands and Ambat are philologically the same word and the mythology of these two beings, or groups of beings, is very similar. If the stone bowl collected by the Rev. V. H. Sherwin was similar to that of Ambat, then it possibly may be a relic of the Qat-Ambat migration into Melanesia. (A. C. H.)

V. H. SHERWIN. A. C. HADDON.

Fiji: Tatuing.

Some Unrecorded Details on Tatuing in Fiji. By Kingsley Roth.

Roth.

167 Tatuing in Fiji is now practically a past art. It is still practised more or less surreptitiously in certain parts of the provinces of Ra and Mathuata. Medical officers have told me that the designs are similar to those found on painted bark-cloth and on the incised designs on clubs. Child Welfare Nurses can tell me little or nothing of tatuing because all the women they attend are in the

bloom of youth and so not tatued, and the old women who are tatued do not in sickness seek the aid of these nurses. It is thus a difficult task for an administrative officer to obtain first-hand information of value on this decaying custom.

The following account of tatuing (veinggia) is brief and incomplete partly because it is a custom restricted to the female sex and then confined to that portion of the body surrounding the pudendum muliebre and adjacent areas which are covered by the short fringe skirt (liku), thus making it an exceedingly delicate subject on which to collect information, and partly because many particulars which I have been able to gather have to some extent been dealt with by previous investigators. The remarks which follow are, so far as I am aware, recorded here for the first time.

There is some diversity of opinion as to whether girls were in former times tatued at puberty or on marriage or on both these occasions, and there seem to be variations in the practice in different districts. The process of tatuing a girl did, however, extend over a considerable period of time, perhaps to be reckoned in months. I have been informed that the tatuing operation was usually performed about the time of a girl's first menstruation. But this point is one which requires further inquiry.

In the Noiemalu district among the Viti Levu mountaineers candidates are required, three days before the operation, to move about gently; if preparing food, to kneel down to it and to use both hands; and when retiring to rest, to lie on the back with both knees flexed in the air. These instructions would appear designed to relieve the parts to be treated from undue strain. Immediately prior to the tatuing operation one of the wise women kneads or works the skin to make it pliable and ready for the instrument. The tatuing instrument (mbati = 'tooth') is constructed like a miniature adze, the 'blade' being made of the thorn of a lemon tree (moli karokaro) bound on to a haft about the size of a large pencil. The mallet (wau) used to tap the back of the instrument and so puncture the skin is made of mbeta wood (Zingiber Zerumbet Linn.), which is a light wood found on the banks of creeks. If a girl of chiefly status is being tatued, a girl of common rank will be done at the same time "as " a consolation" (me kenai loloku).\frac{1}{2}\$ When the tatuing is complete the whole of the area round the mouth is tatued as an outward and visible sign of the fact (me kenai vakatakilakila); when only the front (matana) and the back (muna) and not both the (?) calves of the thighs (temo), then only the extremities of the lips are tatued.

Further down the Wainimala River, at Nairukuruku, Matailombau district (also on Viti Levu island) it is said that no preparation of the candidate's skin is undertaken. Here and, I believe, generally among the mountaineers, the procedure is first to make the puncture, then to rub in the pigment (taken from the nggumu tree—Acacia richii) and not as is apparently done in other parts of Fiji, viz., to dip the point of the instrument into the pigment and then use it to puncture the skin.

At Rewasau in Tholo North province (Viti Levu) I was informed that the pigment used was soot made by burning resin from the Kauri pine (ndakua) (Agathis vitiensis, Benth. and Hook. f., Dammara vitiensis, Seem.). This is the pigment used in that province for painting bark-cloth.

Anthropologists seem agreed that tatuing in Fiji is an introduced custom. One is at once struck by the lack of contrast of a tatued design on a Fijian's skin, which is, roughly speaking, of the colour of plain chocolate. The parts of the body operated on are about the most inaccessible of any, and when the work is complete it is not intended to be seen.

KINGSLEY ROTH.

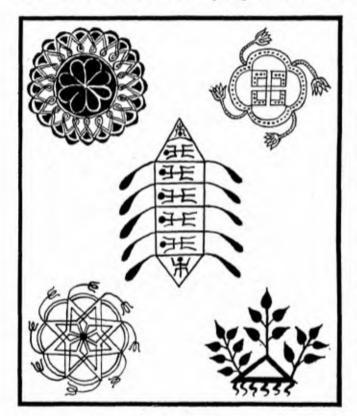
India: Ritual Designs. Note on Geometrical Ritual Designs in India. By Biren Bonnerjea.

Bonnerjea.

In a short note on geometrical diagrams (see Man, 1929, 60), Mrs. Durai gives some illustrations from the Madras Presidency, and remarks that she has no knowledge on the subject in other parts of India. It seems, however, that the prevalence of these designs is much more widespread in India than is commonly known, and at the same time an extensive study of them is yet to be made. The only literature in European languages on the subject of Indian designs is, so far as I am aware, the short note in Man (for the Madras Presidency), L'Alpona ou les décorations rituelles au Bengale by Abanindranath Tagore, Paris, 1921 (for Bengal), and Plate 15 in Gupte's Hindu Holidays and Ceremonials (for Bombay and Central India).

¹ When a chief died, his wives were strangled "as a consolation"; loloku is anything done out of pity or respect for someone.

In Bengal these ritual designs are known as ālipanā. The word ālipanā has been explained in a Bengali dictionary as "the painting of the floors and walls of a house with the "pigment of rice powder on festive occasions." That these designs are not merely decorative is certain. In the French book above referred to it is said : "L'art de l'Alpona est si intimement lié " aux fêtes religieuses et populaires que, pour le bien comprendre, il faudrait connaître ces fêtes" (p. 16). In making these designs, as will be seen from the accompanying illustrations, squares, rectangles, circles, ovals, triangles, dots, spirals, and sometimes also concentric circles, Maltese cross, Swastika, and so on, or parts of them are made use of; besides these geometrical designs conventional figures of human beings, birds, animals, and different objects are also constantly to be met with, and representations of trees, flowers and leaves are very frequent. It seems that a large majority of these designs is more





ALIPANAS FROM BENGAL. (After L'Alpona).

magical in character than purely decorative. What, however, is their special functions, I am unable to say. The interpretation of primitive art, as these undoubtedly are, is beset with too many difficulties, and is, at best, of a very speculative nature. They may be construed to mean one thing, but, on the other hand, they may be construed to mean just the opposite. It is, therefore, too early yet to form any opinion as to the real significance of these drawings. Considering then that as yet comparatively very few designs and fewer explanations of the designs have been recorded, it would be a good thing if readers of Man who are already in India were to collect as much information about them as possible, and also to take photographs of the designs themselves. From personal experience I should say that these designs are to be met with during almost every ceremonial affair, such as birth, annaprāśana, marriage, and so on.

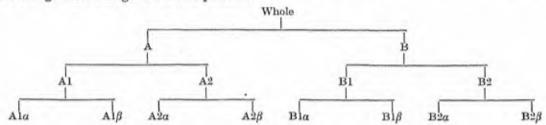
During the discussion of Sir Flinders Petrie's paper on 'Indus Inscriptions' at the International Congress of Prehistoric and Protohistoric Sciences (London, August, 1932), a question was asked as to the modern Indian interpretation of certain signs. The answer to the question may, perhaps, be BIREN BONNERJEA.

found in a study of these alipanas.

Hocart.

Winnebago Dichotomy. By A. M. Hocart.

One of the most striking features of Fijian society is its dichotomy, that is, a group divides into two halves, which again subdivide, and so on down to single clans; and even these split up into two 'edges of the oven.' The most perfect examples are in Kandavu (still unpublished). There village after village is on this pattern.



One of each pair always ranks above the other.

There goes with this a tendency (at least in Lau) to divide the nobility into four: two sections in the running for the chieftainship, two not. I have traced a similar dichotomy in ancient Brahmanic society ('Ceylon Journal of Science,' A, I, 64 pp.) Something of the kind may be traced among the Winnebagoes (P. Radin: 'The Winnebago Tribe,' 37th An. Rep. Bureau Amer. Ethnology).

The tribe is divided into Upper and Lower with four clans in the Upper and eight in the Lower,

thus :—

Lower	R.
1. Water Spirit.	Buffalo.
2. Wolf.	6. Bear.
3. Snake.	7. Deer.
4. Fish.	8. Elk.
	1. Water Spirit. 2. Wolf. 3. Snake.

The order is not the one in which they are discussed by Mr. Radin; we shall see why. The numbers 4 and 8 are certainly not accidental, since 4 is even more ubiquitous among the Winnebagoes than among the Fijians.

Thunderbird is chief of the whole community; Water Spirit of the Lower moiety. Mr. Radin was also told there were three divisions led by Thunderbird, Water Spirit and Buffalo respectively. The two statements appear contradictory and the evidence therefore worthless. But it is a safe rule that if there is a contradiction it is in our minds, not in the facts. Let us assume there is no contradiction. Then the Lower moiety is divided into two sections, one, which we will call the senior, led by Water Spirit, the junior by Buffalo. Thus:—

Thunderbird.	Water-Spirit.
	Buffalo.

The same result is arrived at by another route. The rule is Upper buries Lower, and vice versa. Yet in spite of that rule a lower clan will also bury a lower. Thus Water-Spirit and Buffalo bury each other. The inference is

Water-Spirit : Buffalo = Upper : Lower.

The position of the other clans is not clear. We must proceed by inference.

Wolf are closely allied to Water-Spirit. They both hold water sacred. The Wolf people in the beginning "came from the water. Therefore their bodies are of water." They go then with Water-Spirit. Their face markings are very similar. Wolf buries Bear, and these two clans call one another opposite. Therefore Bear has to go into the junior section.

Deer act as servants to Bear, and so must go into the junior section. So must Elk then, for Deer and Elk are closely related. In the myths Elk is younger brother to Deer; and is therefore junior. Both clans have the same face marks. The position of Elk is confirmed by the fact that it is buried by Water-Spirit in the senior section; so it must be the junior section. It is also buried by Eagle of the Upper moiety, and by Snake. That puts Snake in the senior section.

Nothing is known about Fish. We should expect the eight lower clans to fall into two groups of four. There is no vacancy in the junior section, so fish must go into the senior. In the origin myth of the Thunderbird clan Fish comes after Snake, but that does not necessarily give the precedence.

The arrangement of the Upper Clans is not clear, as there is little information about Warrior; none about the last two. Perhaps some one may be able to puzzle it out from the myths.

The upshot is this :-

$$\begin{array}{c|c} \text{Thunderbird} \\ \text{Warrior} \\ \text{Eagle} \\ \text{Pigeon} \end{array} \end{array} \hspace{0.1cm} \left\{ \begin{array}{l} \left\{ \begin{array}{c} \left\{ \begin{array}{c} \text{Water-Spirit.} \\ \text{Wolf.} \\ -\text{Snake.} \\ -\text{Fish?} \\ -\text{Buffalo.} \\ -\text{Bear.} \\ \left\{ \begin{array}{c} \text{Deer.} \\ \text{Elk.} \end{array} \right. \end{array} \right. \end{array} \right.$$

The Bear correspond in their functions to the *Mbati*, 'Border,' or 'Edge' of Fiji, and occupy the same position. The Fijian Border is either the Lower moiety, or a section of it. Buffalo correspond in function to the Vakavanua or Land Chief of Fiji, who is generally head of the whole Lower Half.

A great deal of such intensive regional work is required before we can embark on ambitious schemes for tracing the origin of the family, clan, exogamy, etc. Qui trop embrasse mal étreint.

A. M. HOCART.

PROCEEDINGS OF SOCIETIES.

BRITISH ASSOCIATION.

Proceedings of Section H (Anthropology).

President: The Rt. Hon. Lord Raglan. In the Presidential Address What is Tradition? the traditional narrative received most atten-That all traditional narratives are, or once were, rules for the performance of rites or ritual drama, was the thesis put forward. No connection exists between history and tradition. Ridgeway, Herodotus and Thucydides are alike unscientific. Family traditions, local traditions, Shakespeare's 'history,' Leaf's theories, Percy Smith's belief in the historicity of Polynesian tradition provided targets for the President's shrewd shafts of gay iconoclasm. V. Grönbech, C. P. Lewis, M. P. Saintyves and Professor G. H. Hooke and his colleagues were quoted in support of the theory of the ritual origin of myths and legends, and many points in support of dramatic origin were made.

Mr. R. U. Sayce discussed The Distribution of the Belief in Fairies, a belief which may have had its origin in a background of feeling plus experiences of dreams, illusions and hallucinations, the latter arising possibly from various physical causes. The spread of literacy coincides with the decay of the belief, which tends to survive, however, where communications are poor; where loneliness, hunger, exposure and fatigue are common. Racial and regional varieties of 'fairies' offer a field for interesting research.

Mr. K. H. Jackson, from a background of wide study of Celtic languages and literature, drew inferences about systems of foretelling the weather other than by direct inspiration. Similarities of phrasing common to the mantic poems and prose weather-lore are perhaps to be found in some Irish poems on the seasons, and also traces of Welsh weather-wisdom in an early Welsh poem on winter.

Dr. Julius Pokorny showed from new evidence the close relation between the Veneto-Illyrian and Celtic languages. The urnfield colonies in Hungary and Upper Italy can be shown to belong to the Illyrians and Venetians; and the great number of Veneto-Illyrian place and river names in the Lausitz territory points in the same direction. An amalgamation between the Veneto-Illyrians and the Tumulus people produced the Celts.

Mrs. Wragg-Elgee showed a specimen of the melldoll, the last sheaf of corn cut at harvest, and suggested possibilities of the survival of the Earth

Mother cult in N.E. Yorkshire.

Professor R. Ruggles-Gates, F.R.S., demonstrated that blood groups may be a useful index of racial characteristics and may throw light on infiltration and race mixture. The A and B blood groups appear to have arisen as repeated mutations from A and O only are present in primitive or outlying peoples such as the Australian aborigines, Bushmen, Lapps and Polynesians. On this and other evidence, A is regarded as older than B. The Eskimos and American Indians, when pureblooded, are probably all O, yet they are relatively advanced and Mongoloid, and might, therefore, have been expected to have received both A and B before crossing Behring Strait. Tests of 300 Coastal Indians of British Columbia showed that they also probably had originally no B nor A, and are thus in agreement with other American Indians.

Dr. Harry Campbell defined the evolution of man from a Primitive Primate as essentially an evolution of brain; his study of the factors involved was stimulating and suggestive. Cerebral neurons do not multiply after birth and therefore phylogenetic cerebral increase must have been due to the selection of innate cerebral variations. The proto-human, lacking the anatomical and instinctive equipment of the carnivore, adopted a hunting career in which a nimble intelligence was imperative for survival.

An important series of papers dealt with African problems. Mr. A. W. Cardinall stated that, contrary to accepted theories, contact with Europeans has strengthened superstitious beliefs among Africans, especially in the case of witchcraft, omens and luck. Dr. R. S. Rattray, C.B.E., defined 'Indirect Rule and discussed its effects. Dr. M. Fortes described a type of joint family, acting under the control of a patriarch, as a unit in most departments of cultural life. This type, with many variations, is found in an area of the Northern territories of the Gold Coast. Dr. Lucy Mair showed how disintegrating had been the effect of the substitution of the European idea of trading for individual profit for the African system of regarding wealth as a reward for socially approved behaviour and as an obligation involving generosity to others. That bride-wealth is a technique for establishing new social relations and for expressing these relations by compelling conformity of behaviour in given situations was the main thesis of Professor E. Evans-Pritchard, in a paper based on observations among the Azande of the Nile-Uelle divide.

Two papers, by Dr. A. N. Tucker and by Dr. S. F. Nadel, dealt with anthropological aspects of musical research. The former outlined the fluctuating pentatonic scale, the rhythm and the types

of instrument of the Southern Sudan.

Dr. V. Suk, from personal observations among the Eskimos of Labrador, combined with studies of reports of investigators in other, regions, showed the downward trend of the vitality of primitive peoples. Changes in diet, the ravages of imported diseases, the destruction of natural resources necessary for the aboriginal mode of life, and the effects of intermixture, are all playing a part in the slow decay of primitive peoples. Another aspect of contact between European and primitive civilization, the marriage problems arising among the Kikuyu, was outlined by Dr. L. S. B. Leakey.

Mr. Kingsley Roth noted the decay of native arts and crafts in Fiji resulting from European contacts, but pointed out that the Kava ceremony, essential to many social occasions, has survived.

Warfare among the tribes on the Lower Colorado river, from observations reported by Professor C. Daryll Forde, is conducted by formal challenge and set battle. Militarism is maintained and perpetuated by magical beliefs and by the social prestige of bravery. Parallels with the Western Plains area beyond the Rockies suggest a common basis of military tradition, possibly of southern origin.

Technological evidence for Indonesian contact with East African culture was given by Mr. Jas. Hornell: the coconut palm and scraper, the barzither, the double-outrigger cance, and beads in Rhodesian ruins with Indonesian counterparts.

Arab writings confirming the connection were quoted.

Sir Richmond Palmer, K.C.M.G., from the geographical distribution of stone circles in the Gambia, and from their type, concluded that they were erected before the rise of the Malinki (c. 1200 A.D.) when the influence of Gana extended to the Gambia river.

Dr. J. H. Hutton, C.I.E., stated that megalithic work in Assam has definite associations both with the dead and their post mortem future, and with a phallic fertility cult: this connection probably arises from the conception of life as a finite material substance limited in quantity. (See Report on the

Census of India, 1933, chap. xi.)

Professor V. Gordon Childe, fresh from seeing and handling the finds in the Indus valley, gave a technical account of the pottery there discovered, which demonstrated its essential community in tradition with the more familiar cultures of the West and yet left an impression of its regional individuality. The Indus civilization, which had reached a high stage 5,000 years ago, showing trade links in raw materials and manufactured articles with Mesopotamia, has been known to archeology for less than ten years, but is one of the most vital additions to that science.

Dr. C. L. Woolley, in an illustrated account of the archaic period at Ur, brought out the importance and interest of the sequences of culture on this famous site. Finds must be spread over the period between 2700 B.C. and the beginning of human occupation of the Lower Valley. In spite of marked changes, a link of continuity proves the presence of the Sumerians in the land from the very outset; incursions are by people of similar stock, but in different phases of the kindred culture evolved beyond the borders of Mesopotamia. There is, therefore, modification but no revolutionary change in the history of culture in this continuously occupied Sumerian centre.

Miss D. A. E. Garrod gave a preliminary account of the result of excavations at the Mugharet et Tabūn, the last remaining cave of the group on which work has been carried out since 1929 (see J.R.A.I., vol. LXII, 1932, pp. 257–277). Sequences important for the prehistory of Palestine have been discovered. A skeleton from the Lower Mousterian is predominantly Neandertal in character, but shows modifications similar to those of the Galilee skull and the child's skeleton from Mugharet es-Skhul, and may therefore be assigned to that branch of the Neandertal genus which Keith and McCown designated in 1932 Palæanthropus Palestinus.

Mr. Oliver Davies found evidence of Roman methods of prospecting and surveying at Sotiel Coronada and Sta. Rosa in south-west Spain. Of the Roman remains near Leicester, the section visited the Raw Dykes under the guidance of Mr. Keay and also Margidunum, a Claudian camp onthe Fosse Way. Dr. F. Oswald has worked for many years on the latter and proved a most helpful guide.

British archæology was represented by papers from Mr. A. T. I. Dollar on Lundy Island; Dr. A. Raistrick on developed Tardenoisian sites in N.E. England; Mr. E. G. Bowen on hill forts and the evidence for valleyward movements of population in Wales. Mr. A. L. Armstrong conducted an excursion to Creswell Crags, Derbyshire, where he has been carrying out important excavations for

some years.

Three evening sectional lectures were given and again proved a great attraction. Dr. E. H. Hunt gave a cinema demonstration of the customs of the Rafai Fakirs of Hyderabad (cf. Man, 1932, 51); Mr. Bertram Thomas, O.B.E., described the first crossing of the South Arabian desert, illustrated by coloured slides of great beauty (cf. J.R.A.I., vol. LXII, 1932, pp. 83-105); Dr. Cyril Fox gave an illuminating account of the inter-relations between the structure and soil character of Lowland Britain and the movements of early peoples.

A particularly pleasant feature was an evening devoted to local folk dances and children's games arranged by Mr. Eric Swift. The 'survival traditional team of Great Easton danced and school children played regional versions of old games. The spontaneity and individuality of the old folk in the Great Easton team contrasted markedly with the uniformity and impersonality so characteristic of 'revival' teams. R. M. FLEMING.

Diploma in Anthropology, University College of Wales, Aberystwyth.

A fresh indication of the growing importance of the Science of Man as an academic is the establishment of a Diploma in study Anthropology at the University College of Wales.

The course of study will be given in the Department of Geography and Anthropology, under the direction of Professor C. Daryll Forde, and will cover all the major branches of Anthropology. An introductory course (1) in Physical Anthropology will be followed by lectures (2) in Ethnography with special reference to primitive economics, social organization, and technology, with more detailed study of the ethnology of a selected region; and (3) in the prehistoric archaeology of Europe and the Near East, from palæolithic times to the iron age.

Candidates for this Diploma will be required to pursue two sessions' work at the University College of Wales: full particulars may be obtained from

the Academic Secretary.

REVIEWS.

EUROPE.

Cardiff, National Museum of Wales. The Personality of Britain: its influence on inhabitant and invader in prehistoric and early historic times. By Cyril Fox, Ph.D., F.S.A. 88 pp., 35 text maps, and 3 folding maps in colour. Paper covers.

1932. Price 2s. 101d., post free.

Some years ago archæologists were wont to confine their attention to the remains of men's handiwork, collecting these objects and making comparative studies of their forms. In recent years the focus of their studies has shifted from the objects to the men that made them, and the objects themselves are of interest mainly from the light that they throw upon the history of the past. We are all prehistorians in these days, and seek to compile and interpret, if I may use a paradox, the history of prehistoric times

It was probably the influence of Dr. Herbertson that led some archeologists to pay attention, too, to the environment that surrounded early man, and this influence first became noticeable with the appearance of Dr. Fox's 'Cambridge Region.' To-day no one would attempt the study of a prehistoric period without first ascertaining what changes in elevation, climate, and vegetation had taken place between that time and the

All prehistorians have long looked forward to the time when some competent writer should give us an account of the early history of our islands, such as Déchelette provided for France, for the pioneer work of Dr. Rice Holmes appeared a quarter of a century ago, and, useful as it still is, must now be considered out of date. It is true that we have valuable monographs on the Palæolithic and Mesolithic Ages in Britain, but of the later periods a complete up-to-date summary is lacking, and we are looking forward to such a work from the pen of

In the meantime this little brochure, prepared as a lecture for the International Congress of Prehistoric and Protohistoric Sciences, is a useful indication of the treatment that the subject would receive at his hands. It is written with a sympathetic insight into the genius of our land, and forms a valuable introduction to the study of the early days that succeeded the introduction of agriculture into our country. Only one slight criticism have I to offer. Dr. Fox dates the beginning of the Neolithic Age at 2500 s.c. This is a great improvement on the greatly inflated dates that were until recently The reduction, however, appears to be insuffi-Whether he accepts the view that I have put forward that agriculture and the potter's art were introduced into western Europe by Ægean traders to Spain, or whether he prefers the view originally advanced by Childe that these arts were learned from the Danubian peasants on the Rhine, the result is the same, the introduction of a true Neolithic Age into western Europe cannot have been earlier than, or quite as early as, 2400 B.C. Even with a rapid spread, as was doubtless the case, this civilization cannot have reached our islands before 2300 B.C., and Keiller is probably safer when he dates the first occupation of Windmill Hill at

This, however, is a small and relatively unimportant point, and we must congratulate Dr. Fox on having produced a very charming as well as useful study, and hope that the time will not be far distant when we may see a larger and more complete monograph from his pen. H. J. E. P.

The Growth of Literature. Vol. I. The Ancient Literatures of Europe. By H. Munro Literatures of Europe. By H. Munro Chadwick and N. Kershaw Chadwick. Cambridge. 30s.

It is a peculiar pleasure and privilege to welcome the first volume of the magnum opus of those eminent scholars, Professor and Mrs. Chadwick. The work is a comparative study of the literatures of various peoples, ancient and modern, undertaken with the "object of determining how far it is possible to trace the
"operation of general principles in the growth of
"literature." The enquiry is concerned primarily with
'unwritten' literature of native origin. Hence, the
ancient literatures of Europe selected for treatment in
this volume are Greek, and the 'island literatures,' Norse,
English, Welsh and Irish—in so far as these are independent of Latin influence.

The material is dealt with according to subjects, and classified chiefly under Heroic Poetry and Saga, Antiquarian Learning, Gnomic Poetry, Descriptive Poetry and Mantic Poetry. In all categories the records of the five literatures are compared, and the common and differing characteristics discussed. In all categories, wherever possible, summaries of poems and stories, and translations of passages in question, are given. The latter part of the book, chaps. xvi-xx, deals with information referring to the growth and preservation of literature in general. This evidence, together with the conclusions suggested by the analysis of the records, leads to the grouping of the material in three main phases. The chronological relations of these phases are noted and their characteristics, as representative of phases in the history of intellectual life, are discussed and summarized.

The general results of this enquiry will be eagerly awaited. For the present, in the space of a short review, one cannot hope to give any adequate impression of the many aspects of a work of such profound scholarship. But by way of example one may refer to the invaluable classification and discussion of the early records of the Celtic literatures, so rich and varied, but to a degree obscure and inaccessible. Not only is there full account of the greater things of both literatures; but there can be little, indeed, within the scope of this survey which the authors have not at least touched on; sometimes with a frank confession of lack of specialized knowledge wherein is also gain—but very often with a suggestion which illuminates beyond the immediate darkness. So it is throughout the book. Whatever the attitude of criticism towards particular interpretations or conclusions, the measure and the value of the assistance here rendered to workers in the various parts of this vast field will not easily be estimated.

Note.—The proofs have been read with exceptional thoroughness. At p. 319, l. 22, I suggest "story" for "form"; at p. 504, l.18, "it is forty times more common "in Cynewulf's poems"; at p. 538, l. 22, "but they "lose their way."

J. L. PALMER.

The Archæology of Yorkshire. By Frank and Harriet Wragg Elgee. [In the 'County Archorologies' Series. Edited by T. D. Kendrick, M.A. Published by Methuen. Price 10s. 6d.]

Mr. Kendrick was well advised in asking Mr. Elgee to undertake Yorkshire for the 'County Archeologies' Series. His survey of N.E. Yorkshire, published in 1930, revealed a competent fieldworker and student. In the present work he has been assisted by his wife. It is, we think, a better book than the former, shaped with more art and written with a surer pen.

The survey covers in twelve chapters the whole range of Man's occupation from the earliest times to the Viking period. It contains, like other volumes in the series, a valuable gazetteer and list of museums in the

country.

It is clearly of the utmost importance that the reader should understand the environmental conditions of human life in the area studied, and the first twenty pages of the work are devoted to a description of Yorkshire. We cannot imagine how this could be better done. Written with ample geological knowledge, with a

command of good English, and without redundance, it is a model for future contributors to the series.

The evidence for Paleolithic Man in Yorkshire is slight; but the Mesolithic provides material of the greatest interest. The moors of the S. Pennines were the camping grounds of the microlithic hunting folk, and the Maglemosian culture is represented in the East Riding.

The peculiar features of the Long Barrow culture of Eastern Yorkshire are well described, as are the successive phases of the Bronze Age. Stress is laid on trade and traffic routes—indeed, throughout the book the geographical background receives welcome emphasis. The Bronze Age settlement site between the 800 and 1,000 foot contours on Danby Rigg is an impressive place and cries out for investigation. But I again take leave to doubt whether Mr. Elgee is justified in speaking of the camp at Eston Nab (p. 84) as Bronze Age. The folk-lore related to standing stones in Yorkshire is important, and we have little doubt that Mr. Elgee is correct in regarding the frequence of the name 'Old 'Wife' as indicative of the original cult associated with menhirs. Mr. Elgee has located Celtic field systems on the Eastern moorlands of the Shire, as well as "irregular" Bronze Age fields," and his hints as to the character and distribution of these will be valuable to students.

The book is no mere chronological catalogue of finds, but a suggestive interpretation of prehistory. We have confined our attention to the first half of the book, which is of more interest to readers of Man than the later.

The writer not infrequently reviews books in this 'County' series, and never ceases to demand more and better distribution maps, essential to a proper study of a county or any other area. High hopes were entertained by the adequacy of the maps in 'Somerset' and 'Corn-' wall,' but here there is a lamentable falling-off; only one distribution map on the county scale is provided, that of Roman Yorkshire (which we can get from other sources). There are no adequate prehistoric distribution maps at all.

CYRL FOX.

AFRICA.

Notes on the Customs and Folk-lore of the Tumbuka-Kamanga Peoples. By the Rev. T. Cullen Young. C.A., F.R.A.I. Printed at the Mission Press, Livingstonia, 1931. Price 6s.

This is the third volume of Mr. Cullen Young's trilogy, of which the first deals with the speech of the Tumbuka-Kamanga (originally, as explained in the Preface, a single tribe, but later to some extent differentiated), and the second with the history of these people, for which the writer was able to obtain most valuable materials from native authorities. This third instalment worthily completes the work and contains matter of unusual interest. The definition given by an old man of "what" constitutes a 'good village'" may be said to strike the keynote of the book and throws a vivid, if perhaps unexpected, light on the moral standards of the people. The good of the community is the end kept in view throughout, and all the various customs and institutions have to be understood with reference to this end.

Chapters I and II describe very fully the ritual gone through in building a village—first, the omens taken in order to discover a propitious site, and, secondly, the action taken to guard it against evil influences. Mr. Young has given the fullest account of this procedure that I have yet seen, except that of M. Junod for the Bathonga, which differs from it considerably in detail. It is not to be supposed that these customs and the feeling which dictates them are peculiar to the Tumbuka-Kamanga tribe; there must be an enormous mass of

cognate matter still unrecorded, and never to be recorded unless by an observer of Mr. Young's experience, linguistic ability and sympathetic insight. It is not every one to whom the elder already mentioned could have confided his view of what makes 'a good village.'

Successive chapters deal with birth and childhood, coming of age, and marriage. Under this last head an important difference is to be noted. The early social organization of the tribe was "matrilineal, with descent "through the sister's son and with all children belonging "to the clan of the mother." The system localized in the Northern Provinces after the arrival of the 'Mlowoka' families' was similar, but not identical. A much more radical change was introduced by the coming of the Ngoni, with their patrilineal organization and lobolo marriage, which has of late been the subject of considerable discussion.

The chapters headed 'Tabu,' 'Omens and Spells,' and 'Nature—God—Worship' are both informative and suggestive and could be dwelt on at great length. Chiuta is the name for the High God—formerly used in Nyasa-land, but largely superseded by the Yao Mulungu. These are followed by 'Justice' and 'Burial.' Among several points of interest connected with the latter we may note the rites for "bringing the spirit back" at the end of the year of mourning. This might seem to be inconsistent with the fear previously mentioned of its returning to haunt the village; yet there is no real contradiction. "The person responsible for the death " has to be found through the diviner, and, if necessary, through the Ordeal. All the customs of the year of mourning have to be carried out and the group set " free for normal life at the ceremonial shaving of the hair. When that is done the spirit can have no cause for resentment and is welcomed back in the manner described" on p. 173. "The departed spirit is apparently in a position to know if any of its clan has " failed to take part in the obsequies and will punish " that individual for the failure. The full rites, without which the spirit will retain a sense of grievance, are impossible if the clan is not complete. Of no other " human groups can it be said with such entire truth . . that 'in Death they are not divided.'

This is important, as the writer has previously pointed out, because it explains why Africans, working away from their homes feel—unless the distance is absolutely prohibitive—the imperative necessity of returning if they hear of sickness or death in the family. Another point which should be emphasized is the fallacy of the widely prevalent (but superficial) view that the spirits are only regarded with dread and dislike.

The book concludes with twenty 'selected fables' and a selection of proverbs. The folk-tales are to a great extent identical with some recorded in Nyanja, while some have a wider currency. It is a pity that the traditional 'Rabbit' has been retained as the equivalent for Kalulu, but Mr. Young is not the only sinner in this respect. No. 16, "The Son-in-law and his Mother-in'law" is a variant of Rattray's "The Chief of the Kuka and his Son-in-law," and I have seen one or more Nyanja versions in MSS. "The Children and their "Parents" is a highly original variation on the very wide-spread theme of the two personages (usually the Hare and the Hyena) who agree to kill (or sell) their mothers, only one keeping to the bargain. "All of them," it may be added, "are being used in the country at this moment for the purpose of pointing some moral which, to the "teller of the fable, appears to be implicit in the tale "itself." Mr. Young appears to doubt whether "all or, "indeed, any of them are of unquestionable antiquity";

but, having regard to the parallel versions, there can surely be no question with regard to the greater number. A. W.

176 Prof. Dr. Carl Velten. Magliaso, 1933. Leipzig:
Kommissionsverlag von Otto Harrassouitz. 63 ×
5 in. 883 pp. Price R.M. 18.

Since the appearance of Dr. Velten's first volume in 1910 (my own copy was long ago sufficiently used to require rebinding), much water has flowed under the bridges. It was only to be expected that the war and subsequent upheavals, together with the personal disadvantage of a long illness, should have delayed the production of its successor, at last completed in the leisure of his Swiss retreat. Dr. Velten's headquarters being, one gathers, at Dar-es-Salaam, and the informants from whom he collected his materials coming from various points on the neighbouring coast (the Mrima), his Dictionary formed a useful supplement to Madan's (compiled at Zanzibar), containing some words not to be found in the latter. The present volume contains over 16,000 entries, many of which have no equivalent in Swahili, but all are competently explained-of, under Abrechnung (with its compounds), accreditieren, Deklarationsformular, eigentümlich, Gerichtskosten, Regelung, etc. Interesting notes as to products and customs are found under Baumwolle, Dill, Elfenbein, Geist, Harze, Hase, Parfum, Schiff, and elsewhere. Proverbs and enigmas are frequently included in the illustrative examples.

The introductory notes (pp. ix-xii) provoke an occasional question. 'Der Kehllaut gh [ξ] wie Gaumen-oder 'Zäpfchen-r gesprochen wird jetzt g geschrieben.' Is it a fact' that Swahilis, as a rule, give it the Arabic pronunciation? As I remember, ghali, gharama, ghasia (this, as I heard it, had s, not z) were pronounced with g (here Dr. Velten's orthography seems reasonable, though the Standardization Committee has decided to retain gh), except shughuli and, I think, faragha, where the sound seemed to approximate to the Ach-Laut (International Phonetic x) or even tended towards h. It also seems surprising that he makes no distinction between the two sounds usually written ch, as in chinja (\subseteq Mombasa tinda) and choka, which does not vary at Mombasa.

Dr. Velten, in his preface, suggests the desirability of a third volume, to contain the new formations or words borrowed from other Bantu languages, the use of which is advocated by Dr. Raum, Herr Roehl, and other German missionaries. The New Testament version begun by the late M. Klamroth and completed by Roehl has already attracted attention and aroused a certain amount of opposition (see Canon Broomfield's paper in Africa, iv, 77). Some of these neologisms certainly justify themselves—as to others, one feels somewhat more doubtful.

Another remark perhaps calls for comment: "Wenn "sich in diesem Wörterbuch mit der grossen Anzahl Stich-"wörter immer ein Suaheli-Ausdruck finden liess, so "ist damit nicht gesagt dass diese Sprache so reich ist "Der Wortschatz ist im Gegenteil gering." This should not be said without qualification. If in some departments the vocabulary is poor, in others it is singularly copious, and borrowing does not always imply deficiency, since—as Messrs. Raum and Roehl have pointed out—Arabic words have sometimes displaced perfectly good vernacular terms: e.g., samaki for swi, maradhi for uwele, asali for uchi (here an awkward homonym may have led to the substitution). Sela for 'wax' (Portuguese cera) is new to me—surely no

synonym for the familiar nta is needed; and, on Dr. Velten's own showing, it would seem to be confined to the southern districts, bordering on Mozambique. For the rest, the Portuguese element in Swahili is almost negligible. How many of the recent English importations will really take root remains to be seen—cf., for instance, p. 90, under Automobil. To anyone with an adequate knowledge of German—an important requisite for the serious study of any African language—this work should prove invaluable.

A. W.

ASIA.

Ata Kiwan, Unbekannte Bergvölker Im Tropischen Holland. By Ernst Vatter. Bibliographisches Institut A.G. Leipzig, 1932. 294 pp., 5 maps, 177 164 illustrations.

This book contains the fruits of an anthropological expedition carried through in eight months, 1928-9, in a practically still unknown part of Dutch Indonesia, on the small mountainous islands of the Solor-Alor archipelagos, and in the eastern part of Flores. The geographical situation of these islands, bridging over from the borders of Indonesia to the Australian continent, seems to characterize the whole cultural and anthropological situation. Physically there is the great difference between the coast people, the Malays and Sundanese in the west and north-west, and the population of the mountainous interior of the islands-peoples of Melanesian and Papuan stock and, in one part, of distinct pygmoid type. Culturally there is the old influence of the Indonesian high-cultures penetrating the west and north-west, whereas in the interior and the eastern parts most primitive cultures still persist, hardly touched by any foreign influence. The clash between these long-preserved cultures and the recent influence of European civilization brings up new interesting problems, often of general importance for modern colonial administration. It is a great asset of this book that the author does not overlook this sort of question. I may give one instance : the problem of the increasing influence of the schools and missionary stations. There is no doubt that their beneficial influence also raises grave conflicts, helps to detribalize the people, creates a new intellectual petty-bourgeoisie, which keeps off from manual labour and, more and more, reduces the social body of the tribes (p. 40).

Remarkable is certainly the way by which the author leads us directly into the real working life of the people. Religious beliefs or sociological facts are, in his description, far from being but collected 'material'; we watch them working in the life of the tribe, and the value of this presentation remains, even if we do not agree with one or the other explanation of a cultural fact (e.g., the explanation of the 'bride-price' out of the patrilineal clan-organization, p. 78). One of the most interesting chapters deals with the agricultural rites of the East Flores islanders. Unlike the legal and practical questions concerning land which are settled within the clan by the clan's 'tuan namah' (master over the land), these agricultural rituals are settled by the whole of the community. They are performed by one paramount 'tuan namah,' who every year designates one part of the land as 'sacred land.' This land is worked collectively with the most scrupulous observation of all traditional prescriptions. So two important ideas blend in these traditional beliefs: the practical idea of indicating for everybody the right time for the different agricultural activities and giving to everybody a sort of 'pattern-field'; and the psychological factor of a deep security for everybody; for all those complicated rituals and religious obligations

that might, in the hand of the ordinary man, be wrongly performed, or performed with too little power, are fixed for all of them in the most authoritative and most powerful way, by the religious chief himself (p. 99).

It is worthy of note that psychological questions lie very much on the line of the author's interest. So he tackles many important problems of native psychology, religion and the trust in priests, education, attitude towards war, criminality, etc., etc. If we add that very interesting texts (spells, magical incantations, etc.) and excellent illustrations accompany the book, we have enumerated the most important, although by far not all, factors that make the book a most valuable monograph.

S. F. NADEL.

MEXICO.

Mexico before Cortez. By J. Eric Thompson. New York and London: Charles Scribners Sons, 1933. 8 in. × 5 in. 298 pp. Price 10s. 6d. Mr. Thompson, already well-known by his work

Mr. Thompson, already well-known by his work in the Maya field, has in the present volume given a general account of the Mexican civilization before the Spanish conquest, and has wisely made it to some extent complementary to T. A. Joyce's invaluable 'Mexican 'Archæology' by putting the emphasis on aspects of the old culture other than those chiefly dealt with by Joyce. The result is a book which can be usefully read by the student in conjunction with the works of Joyce and Spinden, while it is at the same time designed to be of a somewhat popular character.

The author, as in other works of his, brings an independent and original mind to bear on his subject, which leads him to advance some views which may not receive general acceptance. This is all to the good, and whether his findings are confirmed by future research or not, it is stimulating and useful to have them discussed.

The account of the social organization of ancient Mexico is sound and seems to give a true picture so far as we can judge from the miserably unsatisfactory information which has come down to us from the sixteenth century. The only criticism which can be made on this is that perhaps too much attention is paid to the views of Bandelier and those of some other American sociologists. Questions as to the priority of reckoning by patrilineal or matrilineal descent are uncertain enough among better-known peoples, so it seems hardly worth while making any suppositions as to what was the original rule of descent in Mexico.

A good deal of stress is laid on the importance of the cultural connections with the lowlands and the south, rather than with the north. In this the reviewer finds himself in complete agreement with the author. It is, however, not so easy to agree that the Tonalamatl originated with a pre-Maya people. If by pre-Maya is meant prior to the historic Maya of Yucatan or any of the other peoples of allied speech existing at the time of the Spanish conquest, this is no doubt correct, but the evidence certainly seems to show that the calendar originated with a people who were 'Maya' in a wide sense and who spoke some language of the Maya family, probably ancestral to Cholti or Tzeltal. It by no means follows that because the Mexicans did not use the Long Count they therefore must have borrowed the calendar from a people who were ignorant of it, as otherwise, Thompson contends, they would have borrowed this era also, or at least its use of higher units of time reckoning. The best answer to this is his own very just remarks on p. 284 as to the spreading of culture.

The book is well illustrated and the price is very moderate. RICHARD C. E. LONG.

CORRESPONDENCE.

Act of Truth.

SIR,-Professor Rose (Man, 1933, 127), while agreeing with my interpretation of the subtleties of the Indian Act of Truth, says that it is "clearly "not of popular origin." I do not believe that this distinction of anthropological data into 'literary' and 'popular' is capable of exact definition. Both traditions provide evidence differing only in manner, the 'popular' being unsophisticated, the 'literary' sophisticated, and, therefore, to a certain extent, co-ordinated and selfconscious. I quoted two well-known examples of Acts of Truth from modern folk-lore. I also indicated that the chief sources of information concerning Acts of Truth were the Pali Jatakas and the Sanskrit "Ocean of "Story," the two great treasure chests of the Indian story-telling genius. Neither, of course, is purely 'popular' or purely 'literary.' However, the context of most of the Acts suggests, I think, the older rather than the newer, the less sophisticated rather than the co-ordinated or self-conscious. Though, here and there, in Sanskrit literature, there are threads of argument and sentiment which are obviously something akin, I believe the development of the idea is nowhere displayed. I would, on the contrary, like to suggest, that all over the East, there are numerous methods of affirmation which have much in common with Acts of Truth.

Mr. Rose quotes the staff of Achilles. Though this is in the form of an oath, is it not actually a manipulation of a normal Homeric simile? All that is said is: "As "this staff was stripped and is dead, so shall the Greeks "lie stripped and dead before Hector." The question is, however, complicated by the persistence of the blossoming bough, rod of Jesse, in folk-lore, permutating on one side towards the Lucky Tree that always bears fruit and flowers, and on the other towards the Nose-gay of Constancy that never fades. The Act of Truth, at its simplest, is neither moral nor magical. I do not agree that my litigant was afraid that his wife's Sari would change colour and so give him away. This is a purely western interpretation. The Orient is essentially polite, and politeness demands frequent lying. Why should anyone worry about being caught out lying? An oath is taken before men and gods, but an Act of Truth is on a different plane. It is obviously far more serious.

Parallels may be suggested, the common factor being that these forms of affirmation will extract the truth where the religious oath fails. A Muhammadan, who lies upon the Koran, will speak the truth with his hand upon his son's head or by his Watan (tribal or hereditary holding; nowadays, nationality, nationalism). Something of the same quality of simple realism seems to me to underlie the Chinese oath by the broken plate, or the Hindu oath, holding the cow's tail or Pipal leaves. I have heard a Kunbi lie by all his gods, and tell the truth when asked to affirm by the King-Emperor's head on a copper coin pulled suddenly out of the pocket. There is also the powerful Muhammadan oath by bread and salt.

Mr. Rose would say that all these objects were "very "full of Mana." This is scientific short-hand with a vengeance, if not mere jargon; for even 'Notes and 'Queries' (p. 183) hints cautiously that personalities are probably implicit in the original conception. I can only suggest that there is an appeal to the truth of the past, or rather to the past in the present, in an affirmation by a son or by hereditary status, which may contain the rudiments of the Act of Truth. I do not think that the broken plate is mere symbolism ("So let me be broken!") nor the oath by bread and salt mere mysticism. Here the force of the commensalism of tribal unity cannot eliminate the basic conception of the staff of life, with

all its associations of personal experience. In the same way the cow's tail and the Pipal leaves are not purely religious; indeed, they are religious in entirely different ways, though the form of the oath does not vary. The reverence for the cow is Brahmanical, an instilled sentiment, which hangs upon the idea of purification and the passage to heaven. The Pipal tree, on the other hand, is indigenous and known everywhere as the possible residence of spirits. In both these cases, the oath is not by the god, but by the validity of sentiments and associations of a religious order. Mr. Rose suggests that "pantomime might assist the spoken word." I think it is clear that pantomime does not enter into the question of the oath itself, though it plays its part in all initiations and in the ceremonial of the law. What does very commonly enter into the oath, is tactual contact with the object sworn by, an insistence upon physical existence in the present in terms of the past, or of established tradition, which seems to me to be expressed most clearly and at its simplest in the Indian Act of Truth. K. DE B. CODRINGTON.

Childhood and Totemism (cf. Man, 1932, 62; 1933, 95). SIR,-With all respect to Mr. Hornblower, he does not seem fully to realize the implications of his statements. We are dealing with two linked conceptions, the justifiable conception that bears are dangerous animals, and the unjustifiable conception that people can turn themselves into bears. There are four theoretically possible means by which these conceptions could enter a child's mind: (1) Experience. In the case of one of these conceptions this is obviously impossible, and, in the case of the other, in this country highly improbable. (2) Communication from others. This is the solution which I believe to be the correct one, but which does not commend itself to Mr. Hornblower. (3) Instinct. In this case we must suppose that a human instinct may be a mixture of recondite fact and highly fanciful fiction. (4) Imagination. In this case we must postulate a remarkable series of coincidences, by which all, or many, English children select and link the same two conceptions out of a million possible ones.

And what of the word 'bear'? Do children acquire

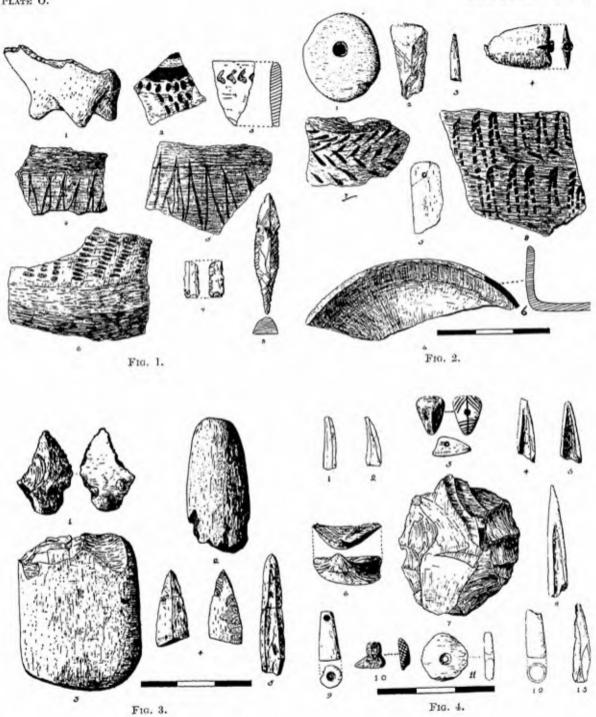
And what of the word 'bear'? Do children acquire a knowledge of it by instinct or by imagination? It seems clear to me that the same agency which transmits the word, transmits the conceptions with which it is associated.

RAGLAN.

Growing Up in New Guinea (cf. Man, 1932, 174;

181 Mr. C. W. M. Hart replies to the Editor's note (Man, 1933, 83) that he was unaware that exception was taken to his review until he saw the Editor's note in print; that he had no wish to be discourteous; that of the books which it was suggested that he had overlooked, 'Coming of Age in Samoa' was clearly if not specifically referred to in his review; Dr. Fortune's two volumes appeared considerably after the review was written; and Bishop Museum Bulletin, No. 76, though published more or less contemporaneously with 'Growing Up in New Guinea,' is nowhere referred to in it. He did not doubt Dr. Mead's field experience, but regretted that her account of Manus culture was limited to one special field, of greater interest to the social psychologist than to the anthropologist.

The Editor hopes that this note may counteract any wrong impression that may have been given.



OBJECTS FROM A CHALCOLITHIC CAVE IN NORTH SYRIA.

N.B.—Fig. 1 from Area A. Figs. 2, 3 and 4 from Area B.

MAN

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ORIGINAL ARTICLES.

Syria: Archæology.

With Plate O.

O'Brien.

A Chalcolithic Cave Site in North Syria. By T. P. O'Brien.

1. Introduction.

The partial excavation of this site was undertaken at the request and with the financial assistance of M. Claude Prost of the Syrian Department of Antiquities. The Oriental Institute of Chicago had chosen for their excavations two tells close to the village of Rihanich, roughly halfway between Aleppo and Antioch, and it was hoped that minor excavations in the vicinity of these mounds would afford evidence of the culture sequence of the district in general and of the tells in particular. This hope was to some extent realized by the results of the cave hereafter described. For the purpose of this note, however, only the Chalcolithic levels will be dealt with in any detail.

As several caves and rock shelters occur in the limestone walls of small ravines near Tell

Jedede, one of the two sites chosen by the Oriental Institute, one of these caves was selected for excavation in September, 1932.

2. Description of Site.

The cave is situated at the foot of a low bluff of limestone at the apex of the two arms of the

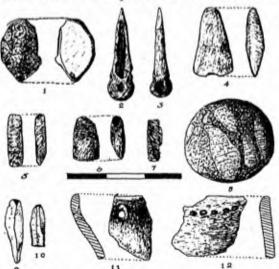


FIG. 5. OBJECTS FROM AREA B.



Fig. 6. RIM AND SHOULDER OF LARGE WATER-JAR WITH STRAINER IN NECK; HAND-MADE OF FAWN-COLOURED CLAY WITH CHOPPED STRAW AS DÉGRAISSANT. 1.85 M.

short Wady Hamam, which converge here before spilling their combined storm waters onto the plain. The cave faces due north and from the top of the cliff a commanding view over the Plain of Antioch to the Amanus Mountains is obtained.

It consists of a single chamber, roughly semi-circular in shape, about fifteen metres long by about eight metres deep, and is partly enclosed and sheltered by the curve of the cliff on either side. Across the mouth a rough wall of stones had been built below the overhang. Almost to the top of this the small terrace is steeply banked as a result of earth washing off the field above the cave. Towards the west end both wall and terrace slope down to the common level of the interior of the cave at the point which was being used as the entrance, as the cave was then still in use as a habitation or stable.

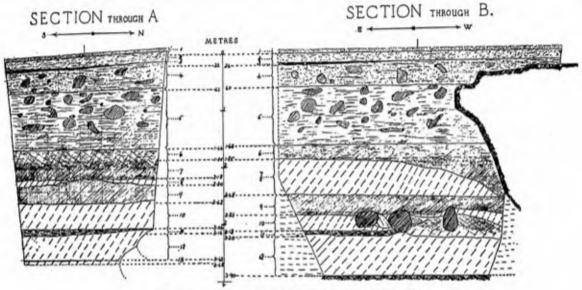


Fig. 7. SECTION THROUGH DEPOSITS IN THE CAVE.

3. THE WORK.

It must be understood that the plan of the cave is approximate only, as no surveying instruments were available at the time. However, it was made as accurate as possible by offsetting from a base-line across the mouth of the cave.

The method of excavating used throughout was by digging down in thin layers of about eight centimetres each (i.e., about the depth of a pick stroke), after which the loosened earth was taken out

and searched by hand.

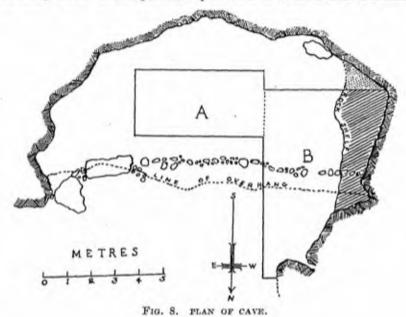
The first area excavated (A in Fig. 8) measured five and a half metres by three metres, and lay well to the middle of the cave to the left of the shallow entrance. The surface before excavation sloped slightly back from the mouth. This tilt in the deposit was also apparent in the underlying strata until nearly two metres depth had been reached. A total depth of 3.68 metres was dug, after which it was not practicable to go down any further.

Area B included almost the whole of the west side of the cave, and a trench was carried out beyond the mouth into the terrace. The comparative lack of pottery, etc., below the Late Bronze Age deposits in the outer, or north end of the trench, showed that prior to that period only the back half of the cave was in use, perhaps as a result of inclement weather. On the west side a broad shelf of soft decomposed rock soon appeared and somewhat lessened the working area. After a few days it collapsed. The results from this section confirmed and considerably augmented those from A. Slight differences in the levels of the strata were due to the varied slope of the deposits in the two sections.

An interesting feature of the lower levels of both areas was the presence of three well-defined

layers consisting of compact, yellow, sandy material and harder lumps of rock, almost wholly sterile. These proved beyond doubt to be the results of repeated rock falls from the roof of the cave, and may have been caused either by earthquakes or, more likely, by the disintegration of this type of limestone due to long, abnormally wet conditions. Above and below the first layer of this material encountered there were occupation levels containing black hand-made pottery, burnished and incised. Prof. J. L. Myres long ago suggested a connection between the occurrence of this class of pottery and a wet climate. In this cave the process of rock decomposition is still going on wherever the stone is under or in contact with damp earth. It was particularly evident in the rock shelf in B mentioned above.

MAN



4. THE DEPOSITS.

Area A.

The strata are numbered and described from the surface down. Levels are in metres and centimetres.

Level.

- A thin layer of dust, ash, and dung; modern Arab sherds, animal bones, etc.
- (2) 0 · 0-0 · 19 Dark earth with local hearths; Arab pottery, etc.
- (3) 0.19-0.22 Thin band of black hearth decreasing towards the entrance of cave.
- ... (0.22-0.40 Brown earth; mixed Arab and Byzantine sherds.
- (4) 0.40-0.62 Brown earth; Byzantine sherds only.
- (5) 0.62-1.66 Reddish-brown earth becoming darker after 1 metre, after which Roman sherds become mixed with Late and Middle Bronze wares (some of which were decorated), showing considerable disturbance of the deposit.
- (6) 1.66-1.85 Dark earth; red and black polished ware begins to appear. Red sherds burnished both sides; black ware, some incised and hand-made.
- (7) 1.85-2.18 Earth a deep chocolate colour; much black hand-made incised ware between 1.85 and 2.00. A few red-brown sherds of similar technique occur. After 2.00 m. pottery decreases in amount.
- (8) 2.18-2.30 First layer of roof débris; sterile.

- (9) 2.30-2.62 Brown loamy earth; a little black incised ware.
- (10) 2.62-3.06 Second layer of roof débris; sterile.
- (11) 3.06-3.16 Dark hearth; no pottery; a few charred animal bones.
- (12) 3.16-3.60 Third layer of roof debris; sterile.
- (13) 3.60-3.62 Thin band of grey ash followed by more decomposed roof débris. In the first few centimetres of the latter a perfect Neolithic lance point in dark brown flint and a flake of obsidian were found.

Area B.

Layers (1) to (6) were consistent with the equivalent layers in A, and need not be described. The horizontal area of (7), however, was somewhat lessened by the outcropping of the first stratum (8), of roof débris, which also proved thicker here than the corresponding layer in A. As regards objects, however, (7) proved much more prolific here than in A, for besides pottery, many small objects, including small jadite and other stone celts, bone points, bead pendants of stone and implements of flint and obsidian were found. The sterile layer of roof débris (8), which separated this occupation level from the one below, thinned rapidly out under the rock shelf, showing that the latter had broken the fall of the roof débris and prevented it from accumulating as thickly here as further out.

Level.

- (9) 2.48-2.83 Brown loamy earth containing a little black burnished and brown burnished ware. At 2.65 m. a sherd with a burnished purplish slip (probably hæmatite) was found. From the same level came part of a vessel of light fawn gritty clay with small oval incisions under the rim.
- (10) 2·83-3·12 Second layer of roof débris; sterile. This also thinned out under the overhanging shelf. The thinnest part was superimposed on an earlier occupation level not represented in A, from which came a flint point and a stone pestle; several large boulders further broke up the continuity of this stratum.
- (11) 3.12-3.20 Dark hearth; few burnt animal bones.
- (12) 3·20-3·90 Third and last layer of roof débris; no trace was present in this of the thin band of grey ash noted in A at 3·60 m., but objects occurred in the material itself, proving that isolated visits must have been paid to the cave at the period of the rock falls, and, as the ash layer in A shows, some attempt was made to live there. From 3·45 m. came a large, flat pebble with marks on the surface made by cutting; from 3·55 m. came a small lump of very coarse pottery containing large grit, a bone point, the tip of a flint lance similar to the one from A, and the broken butt end of another; at 3·65 m. were found a lump of rough pottery containing small pebbles and a burnt fossil shell. At 3·90 m. the yellow material, though still decomposed, became sufficiently hard to indicate rock bottom at last.

DESCRIPTION OF OBJECTS IN PLATE O AND TEXT FIG. 8.

Objects from Area A.

Fig. 1.

- 1. The base of a small bowl with three pointed legs, pink, wheel-made. M. Prost thought it to be Hittite. 1.63 m.
- 2. Decorated sherd; purplish-black on grey slip, wheel-made. 1.68 m. Another specimen from the same level had a black band and herring-bone pattern on grey slip. (?) Early Middle Bronze.
 - Fragment of rim, red burnishing all over, broad arrow incisions under lip. 1.86 m.
- 4, 5, and 6. Three fragments black, burnished, hand-made ware with incisions. In No. 4 the upper part was more highly burnished than the rest. No. 6 was slightly carinated. 1.84 m.
 - 7. A flake of obsidian. 3.65 m.
 - 8. A lance point in dark-brown flint. 3.65 m.

All the remaining objects are from Area B.

Fig. 2.

- 1. A limestone pebble used as a drill-cap, circular hollows on either side. 1.68 m.
- 2. Flint knife, retouched along back. 1.70 m.
- 3. Fragment of a bone point. 1.85 m.
- 4. Flat bead in translucent jadite. 1.85 m.
- 5. Bone plaque with hole for suspension. 1.85 m.
- 6. Part of a black burnished dish. 1.70 m.
- 7. Fragment of a jar, partly burnished red slip, incised. 1.85 m.
- 8. Black burnished and incised sherd. 1.85 m.

Fig. 3.

- 1. Flint point, rough retouching. 3.05 m.
- 2. Fragment of a stone pestle. 3.05 m.
- 3. Large flat pebble with marks of cutting on surface. 3.45 m.
- 4. Tip of flint lance point, fine pressure flaking on under side. 3.55 m.
- 5. Bone point. 3.55 m.

Fig. 4.

- 1. and 2. Two flakes of obsidian. 1.95 m.
- 3. A bead pendant or seal; grey-green stone. 2.00 m.
- 4 and 5. Two broken bone points. 1.95-2.00 m.
- 6. Sea shell used as colour container; traces of red pigment still adhering. 1.95-2.00 m.
- Large flint core. 1.95 m.
- 8. Bone point. 1.95-2.00 m.
- 9 and 10. Two stone pendants; in No. 9 the thread hole entered the side and emerged at the top, and in the base was an oval depression due to boring. 1.95-2.00 m.
 - 11. Button made from a sherd of red polished ware. 1.95-2.00 m.
 - 12. A hollow cylinder of white stone; probably calcite. 1.95-2.00 m.
 - 13. Flint knife with tang for hafting. 1.95-2.00 m.

Fig. 5.

All the following were found at 2.20 metres.

- 1. Half of a rolled pebble of obsidian, broken in two, and perhaps used as a mirror.
- 2 and 3. Two bone points (leg bones of gazelle).
- 4, 5, and 6. Celts of jadite.
- 7. Small flint knife.
- 8. Flint hammer.
- 9 and 10. Two flakes of obsidian.
- 11. Black, burnished sherd, sling-hole under lip.
- 12. Piece of bowl in fawn-coloured clay with small oval incisions under lip.

N.B.—No trace was apparent in the incisions of the black pottery of white filling such as was found in the similar ware from Sakje Geuzi and elsewhere, though this does not, of course, necessarily prove that it was not present originally.

HUMAN REMAINS.

Unfortunately, human bones were very few, and those found were so fragmentary as to be useless for any exact study. They included from A: two fragments of infant jaws, one with the first and second molars in the jaw, but unerupted, $1 \cdot 63$ m.; a piece of an adult jaw from $1 \cdot 68$ m.

In B were found a piece of adult jaw, a few pieces of skull, all broken anciently, $1.85~\mathrm{m}$.; from the roof débris in the trench at $3.20~\mathrm{m}$. came the head of an adult humerus. No other bones were associated

with any of the above, so one must assume that the burials, if such, were disturbed anciently, probably by burrowing animals.

NOTE ON AN OPEN STATION NEAR THE CAVE.

Previous to the excavation of the cave described above I had noted the presence of large numbers of implements and cores of cherty flint lying on the surface of a field between the cave and Tell Jedede. These artifacts, especially the cores, closely resemble those found at Makertou, in Irak, some of which were presented to the British Museum by the Anglo-Persian Oil Company.² On the same field there occurred small jadite celts of the type found in the lower levels of the cave. All the above implements occurred in the greatest numbers on the surface of a low hump in the field, and it seems likely that here was a small village dating back to the earliest times, as witnessed by the cores, etc., which would appear to be earlier than the Chalcolithic celts of jadite.

T. P. O'BRIEN.

Kharga Expedition.

Misses E. W. Gardner and G. Caton-Thompson.

Summary Report on the Kharga Expedition of 1932-33. By E. W. Gardner.

183 The work in Kharga during the last season of the three years' programme to which sixteen weeks were devoted, was, in the absence of Miss Caton-Thompson, mainly geological. Except for ten days spent in investigating a fossil spring area on the floor of the depression six miles north of Kharga, the rest of the time was devoted to an examination of the boundary scarp.

At the first camp near Kharga the existence of a second group of fossil springs was confirmed. These lie on the upthrow side of the main north-south line of disturbance passing through Kharga and east of the spring area. Those at Kharran, described in former reports, lie on the downthrow side, and, as at Kharran, the Kharga springs were not directly associated with the belt of weakness, though the presence of a branch fault passing north of the spring group was suspected. This could not be confirmed owing to the extensive sand covering. In this region the importance and great antiquity of the breccia episode was further emphasized by the thick capping of breccia on the high isolated hills south of Gebel Tarif.

The north-west scarp was next visited, the second camp being established at Umm Dabadib, a 'Roman' fort and settlement twenty-five miles north-northwest of Kharga. Here the old underground water channels explored and described by Mr. Beadnell have been re-opened and four settlers are cultivating the land. Water seemed abundant and good and it was thought that this supply, easily available from the junction of the Surface Water Sandstone with the underlying clays, might have been utilized in pre-Roman times. So far as our investigations went this was not the case. Neither did the Palæolithic people have much interest in this area, but the makers of small tools and arrowheads of fine quality seem to have lived among the wind eroded hummocks of red silty wash which are such a conspicuous feature at the mouths of the wadis. This silty wash not only forms extensive plains but runs up the wadis for a considerable distance and is occasionally found on the water-sheds between them. It was never seen to grade into the gravel of the terraces and would seem to be best explained as due mainly to wind action. The concentration of implements around the hummocks is probably due partly to the shelter provided by them, and partly to the rain pools that must have been found in the hollows between them. Similar implements were found on the top of the north-east scarp in and around a silty pan in which rain had obviously collected in former times.

No tufa was found either in situ or in the numerous and well-developed gravel terraces of the wadis. From Umm Dabadib an excursion was made to Ain Amur, a slightly brackish well high up on the southern side of the deep inlet leading westwards towards Dakhla. Here Wadi Tufa was found in considerable quantity, but it contained few shells or leaves and the area as a whole was also singularly poor in tools.

Returning to Umm Dabadib the main camp was then moved to the north-eastern corner of the depression and for the rest of the season the tufa outcrops of the eastern scarp between latitudes 25° 55′ and 25° 5′—a distance of some 63 miles—were examined in detail.

The main results of this work were as follows :-

- (1) The dating of the top tufa terrace at Refuf both by advanced Acheulean hand-axes in a scree deposit beneath the tufa and by cores and flake tools without hand-axes interbedded in the tufa itself—the first time implements had been found in such a situation.
- (2) The location of a second great mass of Plateau Tufa in the most southerly outcrop mapped by Dr. Ball, bearing the same relation to the Wadi type as that at Bulaq (cf. Geog. Journ., Nov. 1932, pp. 389-91).
 - (3) The mapping of this outcrop for an additional ten miles of hitherto unexplored ground.
 - (4) The collection of nine species of shells new to Kharga, and of
 - (5) beautifully preserved leaves which it is hoped may be identifiable.
- (6) The finding of tools of Middle Palæolithic types in situ in the Wadi Tufa of the southern outcrop.
- (7) The discovery of an unmapped pass—the Aqaba M'tana—in latitude 25° 5'—climbing the scarp by means of tufa terraces, and the find of an early Old Kingdom bowl at the top of the pass.

Riding south for a day's exploratory journey still more tufa was seen lining a deep unmapped bay in the scarp. Since, however, this was at least four days from water and our transport facilities were already stretched to their limit, this new alluring area was left unexamined.

A week before the Kharga work and four days afterwards were spent in the Nile Valley comparing the tufa outcrops there with those of Kharga. A similar succession of Plateau and Wadi Tufas was noted, the latter with tools and shells in situ as in Kharga. The occurrence of similar types of exotic shells in both areas affords a valuable link between them.

The European personnel of the expedition consisted of Miss Frances Purser of Trinity College, Dublin, for the whole time, and Miss McKinnon Wood for half the season, to both of whom the expedition owes much, particularly in the successful collection of shells. One Kufti workman, two locals and a cook, four camel men and nine camels completed the party. Eleven working camps in all were established in Kharga and three in the Nile Valley.

As in former years the expedition was generously helped by Mr. O. H. Little, Director of the Geological Survey, and by the officers of the Frontiers District Administration in Kharga.

Note to Subscribers to the Predynastic Research Committee of the Institute. By G. Caton-Thompson.

As announced to subscribers in June, 1932, it was decided that the last season of the three years' programme of prehistoric research in Kharga Oasis should be devoted by Miss Gardner to the extension and co-ordination of the geological information upon which pivot the archæological results.

Her summary report indicates the scope of the work: it rounds off several problems carried over from former seasons. Two points, however, unstressed in her report, need emphasis from me. The first is the excellence of her organisation which enabled her to execute, without a hitch, intensive work in singularly remote and desolate spots on the boundary scarps, during which a distance of 200 miles was covered. It is one thing to visit these areas hurriedly and lightly equipped, though how few Europeans have, in fact, done it; quite another to remain in them with a party of 11 human beings and 9 camels for weeks.

The second point which receives no prominence in her report is the fact that a fine collection of Palæolithic tools found in situ in, under, and over tufas, has been added to the previous collections. These, being mainly associated groups of considerable numbers, not only provide welcome additional data for typological questions which, the world over, are in process of drastic revision, never to be furthered by surface collecting, but furnish also an invaluable supplement to the body of stratigraphical information obtained in former years. Both the vertical and the horizontal range of Palæolithic evidence has been enlarged by this season's research.

In the late prehistory of Kharga some groups of dwarf tools and arrow-tips associated with rare concave-base arrow-heads of Faiyum Neolithic type, found in the Umm Dabadib area, are noticeably important.

The progress of the work has been summarized from time to time in periodicals and in the press. The most important of these reports appeared in the Geographical Journal, Nov., 1932, under the title

'The Prehistoric Geography of Kharga Oasis.' This article, somewhat revolutionary in suggestions, drew a critical commentary from Mr. H. J. L. Beadnell in the issue of February, 1933, to which reply was made in the same number. A stimulating discussion of certain points was continued in the same Journal last June to which Miss Gardner, Dr. John Ball, director of Desert Surveys, Mr. Little, director Geological Survey, Egypt, and Dr. K. S. Sandford contributed. Other articles dealing with the work have appeared in the Geological Magazine, September, 1932, under the heading 'Some Problems of the 'Pleistocene Hydrography of Kharga Oasis'; in Man, May, 1931 and June, 1932; in Antiquity, June, 1931; in the Illustrated London News, May 2, 1931; and in The Times, April 13, 1931.

Though the immediate needs of provisional publication have thus been satisfied, subscribers will be glad to learn that the otherwise impending financial difficulty of publication of the full and synoptical results of the three seasons' work has been averted by a generous offer from the Institut d'Egypte to include it, subject to formal acceptance in draft, in their well-known series of Mémoires, which already

contains Miss Gardner's monograph on the Faiyum Mollusca.

Complete record and abundant illustration are thus assured. Line drawings of the selected implements have been entrusted to Miss Mary Erskine Nicol, and already 450 tools have been dealt with in pen drawings of very exceptional quality. It is regrettable that the large series of picked tools retained by the Cairo Museum are thus inevitably omitted from amongst the figured specimens.

The Egyptian Department of Antiquities, in enforcing upon prehistoric research laws designed for, and suited only to, the normal field of dynastic and predynastic excavation, thus penalizes its national stone-age collections not less than it hinders the research worker: the reciprocal loss is deplorable. In its own self-interest fresh regulations, permitting the temporary export, under agreed safeguards, of stone-age collections pending proper study and publication, and unmutilated by the capricious retention of picked specimens from geologically associated groups, should be introduced without delay. This was the unanimously expressed and impersonal opinion of prehistorians of all nations represented at the International Congress of Prehistoric and Protohistoric Sciences in 1932.* Subject to the approval of the Egyptian Government, one would urge the appointment at the earliest practicable opportunity, of a small international committee of eminent prehistorians (the geological element in its composition not being omitted), to reconsider the whole question, which affects other countries besides Egypt, and to draw up suggestions for consideration by Departments of Antiquities as to the best means to safeguard the rightful claims of national collections without hindering the advance of scientific prehistoric research.

The completion of the three years' plan in Kharga must not pass without the expression of deep thanks to those whose financial support made it possible. That during a period of unparalleled monetary stress and crushing taxation, support to an annual average of £666 should be forthcoming for archæological spade-work with a strictly unsensational purpose, will be inspiring to a wider circle of research workers than the actual recipients.

The Predynastic Research Committee of the Institute, which has so ably backed the work under the energetic chairmanship of Professor J. L. Myres, remains in being until the completion of publication and allocation to museums of the finds.

Our thanks are given also to Mr. G. D. Hornblower, who shouldered the additional burden of Hon. Treasurer to the expedition; and to Miss R. M. Fleming, who both as Recorder of Section H. and Assistant Editor of Man, has throughout rendered the expedition frequent and much appreciated service.

G. CATON-THOMPSON.

* The resolution, adopted by the plenary session of the Congress on 6 August 1932, was as follows:

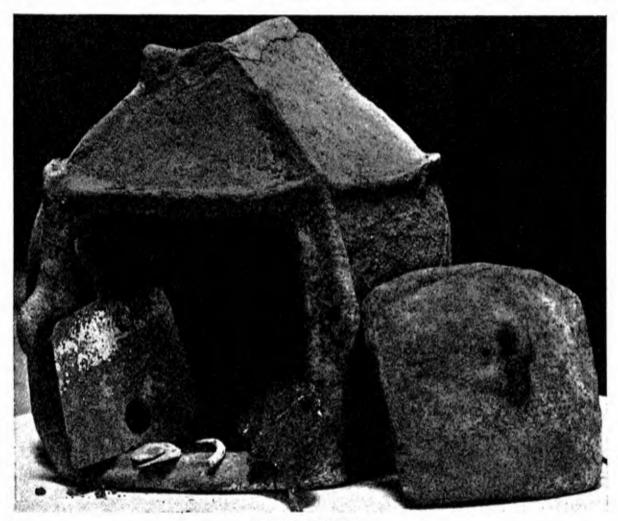
"Que le Congrès International des Sciences Préhistoriques et Protohistoriques enregistre avec un profond regret
la nouvelle que le Département des Antiquités du Gouvernement Egyptien oppose certains difficultés à l'étude
scientifique de la préhistoire du pays. Le Congrès, tout en respectant le droit de la nation Egyptienne de garder
et de disposer des documents de ses origines, et en la félicitant de son encouragement général des études préhistoriques, prie le gouvernement Egyptien de s'assurer que les trouvailles préhistoriques soient administrées d'une façon
vraiement scientifique, pour que les collections soient et restent accessibles aux études spécialistes et que des lots
de diverses provenances et de divers niveaux ne soient pas mélangés: en particulier, de prendre les mesures
nécessaires pour que les trouvailles préhistoriques dont l'étude scientifique depend de la solidarité de la valeur de
leur matériel, ne soient pas separées sans regarder cet aspect de leur valeur scientifique et que des obstacles ne
soient pas interposés à leur examination temporaire à l'étranger par des savants specialistes."

Italy: Archæology.

Moretti.

A Hut-Urn Recently Discovered in the neighbourhood of Rieti, Italy. By G. Moretti, Superintendent of Excavations at Rome.

In December, 1928, a hut-urn (urna a capanna) was discovered accidentally at Bassano-Collano in the land of the Scolopi Fathers, by the road from Tre-Stradi to Ponte Crispolti, in



HUT-URN FROM RIETL.

the district of Campo-reatino, on whose south margin rises the travertine ridge on whose summit stands Rieti.

Within the urn, with ashes and burned bones, were found two bronze blades of so-called 'razors,' one square, the other single-edged; a long bronze wire which served to bolt the 'door' to the opening of the urn. Nearby was a one-handled vessel. The clay urn, in its turn, had been enclosed in a large chest of porous travertine which was found in fragments: only the apex remained whole.

This is not the first time that this locality has yielded hut-urns. Some years ago another was found whole, and in it two clay broken vessels and three broken objects of bronze. G. MORETTI.

OBITUARY.

W. E. Roth: born 2 April, 1861: died 5 April, 1933.

We regret to record the death on 5th April, 1933, of Dr. Walter E. Roth, who was an Honorary Fellow of the Royal Anthropological Institute.

Dr. W. E. Roth was the last of a number of sons of Dr. Mathias Roth, surgeon, of Wimpole Street, London, all of whom distinguished themselves in either anthropology or surgery. We noted in 1925 the death of one, Mr. H. Ling Roth, formerly

Keeper of Bankfield Museum, Halifax.

Walter Edmund Roth was born in London on 2nd April, 1861. He was educated at the Collège Mariette, Boulogne-sur-Mer, and at Paris and Darmstadt. He later studied at University College School, London, where he remained from 1868 to 1878 and where in his last year he was First Silver Medallist for biology and comparative anatomy. He proceeded to Magdalen College, Oxford, and graduated B.A., with honours in biology in 1884, and was a Demy (scholar) of the college. He subsequently qualified with the degrees of M.R.C.S. (Eng.), L.R.C.P. (London), being attached to St. Thomas's Hospital, and was for a time demonstrator to Sir Ray Lankester. At the age of 27 he was appointed Director of the Government School of Mines and Industries, South Australia, and six years later was placed in charge as medical officer of the Boulia, Cloncurry, and Normanton public hospital in North Queensland. In 1897 he became Chief Protector of Aboriginals, Queensland, a post which gave him the opportunity of studying the native inhabitants in much detail. He was later (1905) the sole Royal Commissioner to inquire into the conditions of natives of Western Australia and for a time was in private practice in Tasmania. In 1906 he was appointed a stipendiary magistrate and protector of Indians and Government medical officer in the Pomeroon district in British Guiana, where he spent the following nine years. From 1915 he was also in charge of the Demerara River, Rupununi, and North-West districts, and on retirement from the Civil Service at the age of 67 was appointed Curator of the Georgetown Museum of the Royal Agricultural and Commercial Society and Government Archivist.

In addition to being an Honorary Fellow of the Institute W. E. Roth was an honorary member of the anthropological societies of Berlin and Florence, and in 1902 was president of the anthropological section of the Australian Association for the Advancement of Science in Hobart, Tasmania, and received the Clarke medal of the Royal Society of New South Wales for original researches in natural science. He had the distinction of leading three scientific

expeditions in British Guiana.

His contributions to ethnology exhibit the painstaking accuracy in detail of text and illustration of a man who was devoted to his studies, and his works on the native inhabitants of North Queensland and on the Guianese Indians are now valued works of reference. The extract which follows is reproduced with acknowledgement from the extraordinary issue of the official gazette of British Guiana which was published on 6th April to announce the death of W. E. Roth. ". . . Dr. Roth was an anthropologist whose work had won for him a "world-wide reputation. He was a recognized authority on the Guiana Indians, while his "translations of the Travels of Richard and Robert Schomburgk showed his great capacity both as an editor and translator, as well as his wide knowledge of the country and its peoples. His death will be widely mourned as an irreparable loss in the knowledge and study of primitive races. In Dr. Roth British Guiana has further lost an enthusiastic and zealous worker and a "loyal friend who gave unsparingly of his time to all studies of value and interest to the "Colony. . . "

The following list of publications is compiled from the catalogue of the Royal Empire Society (1930):—

- Ethnological studies among the N.W. Central Queensland aborigines. Brisbane.
 - Notes on social and individual nomenclature among certain North Queensland aborigines. Roy. Soc. Queensland, Vol. XIII.
- 1901-06. North Queensland Ethnological Bulletin, Nos. 1 to 5, Nos. 7 and 8. Queensland, Home Secretary's Department. Brisbane.
- 1902. Games, sports and amusements of the North Queensland aborigines. Austral. Assoc. Adv. Science, Vol. IX.
- 1902. Notes on savage life in the early days of Western Australian settlement. Roy. Soc. Queensland. Vol. XVII.
- North Queensland Ethnography. Records of the Australian Museum. Vol. VI.
- 1909. Some technological notes from the Pomeroon River, British Guiana. J.R.A.I. Vol. XXXIX, 1909, pp. 26, ff.
- 1910. North Queensland ethnography; transport and trade; decoration, deformation and clothing; huts and shelters; postures and abnormalities; social and individual nomenclature. Records of the Australian Museum. Vol. VIII. Sydney.
- Narcotics and stimulants of the Guianese Indian. British Guiana Medical Annals. Old time Indians. Timehri. Vol. I.
- On the native drinks of the Guianese Indian. Timehri. Vol. II.
- Some examples of Indian mimicry, fraud, and imposture. Timehri. Vol. VII.

- 1922-33. Richard Schomburgk's Travels in British Guiana, 1840-44. Translated and edited by W. E. R. Georgetown.
- 1929. Additional studies of the arts, crafts, and customs of the Guiana Indians, with special reference to those of southern British Guiana. Smithsonian Institu-

tion, Bureau of American Ethnology. Bulletin 91. Washington.

Acknowledgement is due to the Daily Argosy and the Daily Chronicle, both of Georgetown, British Guiana, for some of the information included in the above notice.

KINGSLEY ROTH.

REVIEWS.

ARCHÆOLOGY:

Prehistoriska Vinča I, Industrija Cinabarita i Kosmetika u Vinči: two appendices; I. The bound Deity in prehistoric Religion; II. Vinča 186 and the Hyperborean Myth. By Miloje M. Vasic. Belgrad, 1932. 4to. 159 pp., 149 illustrations, 4 coloured plates.

This is the first instalment of a complete publication of the important site at Vinča, 14 km. east of Belgrad on the Danube. This part deals with the cinnabar industry which Professor Vasić regards as the raison d'être of the settlement and so logically to be put first, and with the use of cinnabar (mercuric sulphide), galena and green pigment for cosmetics as witnessed by their actual occurrence in lumps and on palettes, and by the painting of statues found on the site. He informs me that Part II will discuss the lower layers with pithouses, the interments and Egyptian influences; Part III, the plastic; Part IV, the ceramic; Part V, various small objects. These are far advanced and may be expected shortly.

The book is entirely in Serbian, without any résumé, but a great deal of its contents is summarized with good illustrations in the *Illustrated London News*, 18 October and 1 November, 1930, pp. 664 and 752. Earlier results may be found in *Praeh Zt.* ii, p. 12, in Professor Gordon Childe's 'The Danube in Prehistory,' and in reports of meetings of the British Association, see Man, 1930, 151. Recent excavation has been financed by Sir Charles Hyde.

Professor Vasić says again and again that his results are not to be judged until his whole material has been published, save by such as have seen it set out in the museum at Belgrad. I will accordingly abstain from discussing his main position. The deposits are 10.50 metres deep, and the site was occupied from very early times to the coming of the Romans in A.D. 6, when the mines were unable to compete with those in other parts of the Roman world. Below 9 m. were found round huts sunk in the earth (Vinča I), above, rectangular houses (Vinča II). Childe (op. c. p. 26) puts the division at 5.5 m. from the top. The ore was obtained from Suplja Stena in Mt. Avala about 20 km. to the south where the workings can still be seen. It was roasted and prepared at Vinča, where, as far as 9 m. down, were found sheds containing 3 or 4 kilns precisely adapted for saving the precious mercury. For warming their houses the inhabitants used braziers, not hearths. Certain statuettes apparently wearing gas-masks may represent the operators or their patron deities; such masks are described by Dioscorides and Pliny. The inhabitants were no doubt exporters, but themselves used their black and red pigments as cosmetics, for their statuettes have faces and bodies painted in these colours, as shown on the coloured The pigments were kept in little vessels in human and beast shapes. The best, called after Sir Charles Hyde, is in the form of a human-headed bird streaked with a black pitch-like substance. These vases may imitate imported metal-ware. It is curious that the

Agathyrsi, who lived hereabouts, were proverbially picti. Professor Vasić insists on the many evidences of Ægean influences or of influences from further east and south which came through the Ægean. In this book he states his belief that Vinča was a colony from the Cyclades founded soon after 1580 B.C.; he compares the description in Herodotus of the Hellenic colony of Gelonus in Scythia and the Babylonian colony of which the records have been found at Kul-Tepe in Cappadocia. The colonists seem to have come up the Danube rather than through Macedonia. The most important guide in dating is the occurrence of a ware derived from 'Minyan' ware (M.H.I. say 1700 B.C.) in a pit-house 7 metres down and with it ware with black spirals on a red ground. The time necessary to accumulate the 4 m. below it would seem to put the origin of Vinča somewhere not far after 2000 B.C.

But in his letter to me of 20 January, 1933, Professor Vasić says "Die Gründung von Vinča ist vielleicht gleichzeitig mit der Gründung von TrojaVI; sie ist nicht " älter wie die mykenische Kourf . . . dessen Anfang " etwa nur in die Zeit des Amenhotep III, d.h. um " 1400 v. Chr. zu setzen ist." We shall await his reasons

with interest.

Appendix I deals with 'The Bound Deity'; there Appendix I deals with 'The Bound Delty; there are a few references in Greek literature to statues of deities being bound to prevent their deserting their worshippers, just as Victory at Athens was wingless so that she should not fly away. Our author maintains that the familiar Artemis Ephesia, whose statue was hung with Kanthes (some sort of fillet or ribbon), was bound in this way. He thinks that the holes in the stumpy limbs of figurines found at Vinča and at other sites in south-east Europe and also the lines and stripes across their bodies are evidence of a similar usage. do not know of any really satisfactory explanation of such holes, but this one seems rather far-fetched. People love tying things on to cult-objects, e.g., images of Our Lady and of the Bambino; that is not the same as tying down a statue to its place.

Appendix II suggests that the story of the Hyper-

borean maidens, who brought offerings wrapped in straw to the shrine at Delos, had to do with a sending from Vinca to its mother-land in the Cyclades. The shrines of the maidens have recently been found and prove to be tombs of the Mycenean period when Vinča flourished, but the juxtaposition is, like any other explanation of the Hyperboreans, too good to be true.

We hope that Professor Vasić will even in these hard times make swift progress in his great task of publishing in detail the results of the chief scientific excavation in his part of the world. May we ask him to supply a summary in some better-known language? Not that I regret having read right through a book in Serbian. May I note that since the language was reformed by Vuk Stepanović, less than a century ago, the imperfect and agrist tenses, interesting survivals of Indo-European forms, seem to have dropped out of use, I only noticed one agrist; and the infinitive seems only to occur after the word 'can'? ELLÍS H. MINNS. Cucuteni. von Hubert Schmidt. 40 pls. (1 in colours),

4 plans, and 21 text figures. Leipzig, 1932. Since the excavations of 1909-10, Cucuteni has been the classic site for the study of the painted pottery of South-Eastern Europe. The excavator issued a preliminary account of his results in 1911, but the full publication was delayed by the war and its aftermath and then by the illness which, we now learn with deep regret, has ended Hubert Schmidt's brilliant career. The pardonable delay has not robbed of its worth the scientific publication—the penalty which generally awaits unwarranted postponement—for no site equally rich or well stratified has been published in the interval. Yet, of course, the description of a dig twenty years old inevitably reminds us of technical progress made in the interval: the application of post-war methods would have given a clearer picture of the settlement and its defences

The description and presentation of the material is admirable and makes the book indispensable for a proper study of South-Eastern Europe and the Ægean. Hubert Schmidt describes the pottery particularly clearly and traces the development of the white, red and black ware with its free ornamentation of Cucuteni A to the predominantly dark-on-light fabrics with tectonic decoration of B. Intrusive comb and corded sherds are shown to be late in, if not later than, the B village. A clay model of a copper pick-axe and a flat axe of copper came from A; a shaft hole axe, an armlet of poor bronze, a thick-butted flint celt of Nordic type and probably a full-size horn imitation of a stone battle-axe were found in B. An imported sherd of Minyan ware gives 1500 B.C.

(why not 1800?) as a central date for the B village.

The chronology of Cucuteni A involves the author in long digression to Anau, Hungary and Thessaly, in which Europe's independence of the Orient is reaffirmed and vindicated against the theories of Childe, Menghin and Myres. The late Dr. Schmidt, through his experience at Anau and his work on Schliemann's Collection from Troy and Oppenheim's pottery from Tell Halaf, was entitled to speak authoritatively on Oriental archeology corrects the description of the Trojan red-cross dishes as 'Firnismalerei' given by Frankfort and Jenny: the coloured slip or paint owes its lustre to polishing only. But unless his premises be accepted, his preference for a chronological standard provided by barbarian northern cultures instead of the historic civilizations of the south will not inspire confidence. Cucuteni A is thus dated: it is the ancestor of Dimini, and therefore more or less contemporary with the latter's predecessor, Sesklo. Sesklo, however, may be "dated through Anau III and " Susa I": for Sesklo and Susa I are divergent offspring of Anau I. Susa I, on the Sumerian evidence, would belong to the end of the IVth millennium (of course, even taking Christian's dates for Ur, Schmidt could hardly have maintained so late a date in the light of recent work at Erech), and sherds from Anau IIIa belong to a degenerate phase of the Susa I style. Anau IIIb is 'dated' to 2500-1500 B.C. by button seals with Crotan (why not add Sumerian, Elamite and Anatolian) analogues, and a gable seal of Hittite type. A turquoise bead from Anau Ia has a parallel in an amber hoard of (probably) dolmen age from Sweden, and the Maltese Cross appears on pottery in Anau IIa and in Bohemia in Passage Grave times-interesting facts cited apparently to confirm the date of 3500 for Anau I. (Why not invoke Pueblo pottery with familiar Thessalian analogues!) The clay stamps from Erosd finally establish the date round about 3000 B.C. arrived at from the Anau III-Susa I-Seskle equation: for "they can only be regarded "as the prototypes of the Ægean, Egyptian and Oriental "button seals" (although they appear as strays on the western edge of the province that extended to the Indus before 2500!). V. GORDON CHILDE. Indus before 2500!).

Fouilles du Puy-de-Lacan (Corrèze). By L. and H. H. Kidder. Extract from the Revue Archéologique, tome xxxv, 1932.

The grotto in question is near Brive. The interior has been much disturbed, but in the talus just outside are three Magdalenian layers. These were seemingly in place, but throughout there were many tree roots and perhaps some burrowings of animals. Over the archæological layers and occurring, too, back in the grotto is a superficial layer of sand. The point of the article is not to describe a Magdalenian site but to draw attention to the discovery there of pebbles en-graved somewhat in the Glozel manner. Most of these were found in the top level, but some came from the Magdalenian levels below. There is no question of fraud in this case, and there are two problems to be resolved: (1) the date of the specimens; (2) what they are. Naturally Glozelians claim that their rightful place was the Magdalenian levels and that, if the superficial layer is of later date, they have been brought up into it by burrowing animals. Others say exactly the opposite and suggest that they are not in situ in the archaeological layers. On the face of it this latter suggestion seems the more likely. Next, as to the signs cut on the pebbles. These are mostly intersecting lines, occasionally somewhat resembling a letter. However, signs resembling those on statues-menhirs do occur, and simple cup markings and bars of parallel lines also may be seen. A reviewer who has not yet seen the objects in question has no real right to form an opinion. However, if I may, greatly daring, venture to do so, I believe that these finds are of Gallo-Roman date, even as were the original finds— not the later ones—at Glozel. At Puy-de-Lacan, where admittedly there has been much subsequent disturbance at the site, some of these relatively heavy objects easily found their way into earlier archæological levels below. The statue-menhir signs, however, are peculiar in this connection. But we shall have to wait and see. The authors are to be congratulated on setting forth their discoveries without any bias in a true scientific spirit. Other French savants have naturally formed various opinions on the problems in question. M. C. B.

Early Steps in Human Progress. By Harold Peake,

M.A., F.S.A. London : N.D.

We must be grateful to Mr. Peake for this comprehensive treatment of the development of arts and crafts. His book surveys the origins of material culture in its primary manifestations from the discovery of fire to the utilization of iron. A chapter is devoted to each major topic, e.g., 'How animals were tamed,' 'The 'earliest mills,' 'The evolution of the house'; and with some introductory matter on racial types there are 23 chapters in all.

What gives Mr. Peake's work special value is his ability to present hypotheses that will take into account every accumulation of fresh evidence. Some of his suggestions may have to be abandoned, but that does not destroy their interest; they are always illuminating and seem to reveal an intuitive understanding of the mind of primitive man. The illustrations are well chosen and clearly reproduced, and though few are new, some (as in Chapter XIV) are distinctly original in a

work of this kind.

Throughout the author has drawn freely on his wide travels and wider reading, and has given us much of absorbing interest by the way. E. E. E. The Flint Miners of Blackpatch. By J. H. Pull. With a foreword by Sir Arthur Keith, F.R.S. Williams and Norgate, Ltd. 1932. 10s. 6d.

In the preface to this book Sir Arthur Keith rites: "They [the author and his collaborator] writes: " devoted their week-ends and holidays to a systematic " exploration of the site-over a period of eight years, " from 1922-1930." This should at once put this volume on a different footing from those numerous works where an author has rushed into print after only one or at most two seasons' work in the field. It must be said, however, that, though the book is very readable and the author's enthusiasm for his subject quite infectious, there is a lamentable absence of field notes. Explorations and finds, which if fully set forth and described would occupy several volumes, are dismissed in a chapter or two. It is not suggested that the author has omitted to take sufficient notes while digging. Doubtless he has done so. But the results are somewhat abruptly stated without any detailed account of the explorations being given. and so any cross-checking of the conclusions is naturally

Blackpatch is on the Downs not far from Findon, inland from Worthing. It is in sight of Cissbury. Round Barrows have been discovered on the Blackpatch Down, as well as cup-like depressions which have proved to be flint mines. After briefly describing the site, chapters follow on the fauna, implements and burials unearthed. In a final chapter general conclusions are given. Frankly, some opportunities for criticism do occur! Incidentally, the author does not always seem to keep sufficiently in mind the essential difference that exists between the Windmill Hill and Peterborough cultures. As the one appears to have come from the south and the other-which reached S.W. England at a slightly later date-is of Baltic origin, the two are, at any rate at first, quite distinct. Furthermore, earthen Long Barrows should not be confused with Long Barrows containing stone chambers within. However, these are rather suggestions to the author than serious criticisms of his published ideas, for, after all, he is chiefly concerned with the culture which erected the Round Barrows. One can only wish the volume success; it is an interesting experiment to publish such local exploration straightway in book form, rather than year by year in the pages of the journal of a local archeological society.

Urgeschichte der Pfalz (1 volume), and Die Pfalz unter den Roemern (2 volumes). By F. Sprater.

Pfaelzische Gesellschaft zur Foerderung der Wissenschaften. (6 Marks per volume.)

These three competent and well-illustrated volumes are to some extent meant to act as a guide to the historical museum at Speyer and as a catalogue of the finds of prehistoric and Roman date in the Pfalz; but they also achieve a wider purpose, in that, especially in the Roman volumes, the material is not only collected but sorted, so that it is possible to gain an accurate impression of the various departments of life in the province; for though the Pfalz was only a small part of Roman Germany, most of its activities may be regarded as typical also of other parts. In particular the Pfalz played an important economic part owing to its possession of raw materials such as clay and iron-ore.

Perhaps the author, though in most respects admirably scientific, disappoints occasionally in the choice of his illustrations; some more detailed plans and sections of Roman forts would have been valuable, and similar plans might have replaced some of the photographs in the section on prehistoric dwellings, which give little

information and are too small to interpret. Further, the prehistoric section, though carefully drawn up, perhaps shows in places a tendency still to date purely on typological grounds, and not much account is given of the relation of finds to each other. In the Roman section, there is much discussion of general problems, but it is a pity that some more difficult questions like the real nature of the canton and its difference from the municipium are avoided. More exact evidence might also be given about the mining industry; some of the prehistoric bronzes might have been analysed, and the analysis of some shots of Roman brass from Eisenberg is useless as it is too vague and because no analysis is given of the Goellheim ore from which these shots are supposed, though without good reason, to derive; they would seem rather to be due to a sulphide ore. Nor is there evidence, as the author assumes, that zinc was being worked at Wiesloch or elsewhere in Baden in Roman days. Finally, some sort of subject (as well as topographical) index is needed, there not being even a table of contents to enable one to find one's way about.

OCEANIA: ETHNOLOGY.

St. Matthias-Gruppe. By H. Nevermann. Band 2 of the Melanesian section of the Ergebnisse der Sudsee-Expedition, 1908–1910. Hambury: Friederichsen, de Gruyter & Co., 1933. 12 × 94 in. 251 pp., 161 text figs., 16 plates, and 3 charts.

Among the minor unfortunate results of the Great War and its aftermath of financial stringency has been the slowing down of the publication of the results of the Hamburg South-Sea Expedition to Micronesia and Melanesia organized by Dr. G. Thilenius. Several of the members of the expedition have also passed away without living to see the completion of the great work to which they had set their hands-the latest to be lost to us being Dr. Paul Hambruch, a devoted worker and a very kindly man. From this and other causes, in the volume under review, the field notes of the actual recorders have had to be collated and converted into a finished monograph by one who was not with them at the time. As a consequence, the personal touch and much explanatory matter not included in the field notes are necessarily lost. To compile an exhaustive account of the culture of the St. Matthias Group from the voluminous notebooks of the four members of the expedition (Drs. W. Muller-Wismar, Hellwig, Fulleborn, and Reche), who spent August and September 1908 in the islands, was a task of much difficulty, and it is a pleasure to be able to congratulate Dr. Nevermann on the eminently successful result of his labours. The monograph is a model of systematic arrangement and is a most valuable contribution to the ethnology of Melanesia and a worthy companion to the magnificent monographs that have preceded it.

The St. Matthias Group consists of three main islands, St. Matthias, Emir and Tench, lying to the eastward of the Admiralty Islands and northward of New Hanover. The culture of the first two, forms a single unit, but that of Tench, an island only 800 metres long by some 600 metres in width, differs in material particulars. The cultural background of all is Melanesian, influenced in important respects by Micronesian contact. The language is closely related to that spoken on the coasts of the Admiralty Islands, and much of the social and material culture has been derived from that locality, although the potter's art is unknown in the smaller group. Influences from New Hanover and the north of New Ireland (= New Mecklenburg) are also apparent; inflows from several directions have met here, leading to a tangle of culture: Micronesian voyagers in particular have left their mark, for to them must be referred the

introduction of a primitive form of loom, used in the manufacture of fabric woven from the bast fibres of the banana in Emir and from leaf strips of the screw-pine (Pandanus) in St. Matthias. This loom and the weaving methods employed are described at length; they appear to have come direct from the Carolines and not by way of Kapingamarangi, for weaving there is done by men, whereas in St. Matthias and the Carolines it is the work of

Contact with the people of some of the Polynesian outliers on the borders of Melanesia is also considered as likely to have had some slight influence upon the

culture of the group.

The material culture is elaborately described, the compiler having the advantage of large collections wherewith to check and amplify the written notes and sketches. The peculiar types of outrigger cances in use, house construction, domestic articles, clothing, ornaments, weapons, tools, and the like are all well illustrated and described in satisfactory detail. Regarding the canoes, those of St. Matthias and Emir have three booms, the median provided with an inverted T-shaped connective, found also in New Hanover and north New Ireland, while in those of Tench the median boom and its peculiar connective are suppressed. Propulsion is by paddles, the blades having the typical Melanesian lanceolate form.

As is inevitable under the circumstances there is a certain unevenness in the treatment of the subjects other than those dealing with material culture. Games, for example, are sketchily treated, notably string-figures, which receive bare mention. Some confusion has also crept in in the Geographical section. Of the sketch plans given of the three islands, that only of Tench has the degrees of latitude and longitude shown, and on p. 16 some statements in the text are contradictory. St. Matthias is there said to lie between 1° 11' and 1° 32' St. Matthias is there said to be between 1° 11′ and 1° 32′ S. latitude, but the northernmost point, Cape Siemers, is given as 1° 17′ S. lat. A printer's error occurs also in the statement of the longitude of Tench; this island is given as lying between 150° 42′ and 51° 42.5′ East longitude; according to the chart these should be, respectively, 150° 40′ 25″ and 150° 40′ 45″, if the reef be excluded. The want of an index is a serious drawback to ready reference. JAMES HORNELL. back to ready reference.

Ethnology of Manihiki and Rakahanga. 93 Rangi Hiroa (Dr. Peter H. Buck). Bulletin 99 of the Bernics P. Bishop Museum. Honolulu, 1932. 8vo. 238 pp., 11 plates.
In enlisting the services of Dr. P. H. Buck (Te Rangi

Hiroa) the Bernice P. Bishop Museum did a stroke of excellent business. No one to-day is better qualified to carry out fieldwork in the Polynesian area under the difficult conditions that now prevail through the destructive effects of missionary energy—unintentional though they may be—upon the native culture of the island world, aided materially by ever-increasing contact with the white man and an exotic system of government. Proof of Dr. Buck's ability and wonderful grasp of the intricacies of native life is shown on every page of this monograph, for who, but he, could produce a volume of 238 closely-printed pages after a stay of only three weeks on one island and a couple of days on another? Prodigious! as Dominie Sampson would say. True it is that the two islands, though 25 miles apart, are inhabited by a homogeneous population constituting a single unit; till about 1852 it was the custom of the people to inhabit one island at a time, leaving the other fallow till food scarcity in the former compelled a migration en bloc to the sister atoll.

Even so, Dr. Buck's achievement is remarkable; at

the same time it is obvious from several lacunge that had a longer sojourn been possible much more information would have been procured. For example, we find it stated on p. 197 that though string figures are known,

none was recorded.

From traditional accounts it is deduced that the islands were settled from Rarotonga about 550 years ago, somewhere about the time of the last migration to New Zealand. Linguistic study shows the dialect to approximate more closely to that of the New Zealand Maori than to that of Rarotonga, which must therefore have become modified by other influences subsequent to the departure of the two bodies of emigrants. The author points out that the alphabet introduced by the missionaries falsifies the correct rendering of the pro-nunciation of words and leads to the same lamentable confusion as has occurred in Fiji, where a c, for instance, has to do duty for the th in 'that' and gives us the abortion of 'Cakobau' when 'Thakombau' is the spoken word!

The record before us is particularly strong on the technological side. The uses to which the products of the coconut palm are put are detailed at great length, especially in regard to the variety of foods obtained from the nut; the utilization of the leaves by plaiting in the manufacture of mats, thatch, baskets, fans and other household articles is treated at great length, with profuse

illustration.

Fish being the staple flesh food, equal attention is devoted to the means for its capture. The island hooks are the subject of a detailed comparative study of much value. Outstanding differences are noted between the Polynesian form of bonito hook and those of Melanesia and Micronesia; of the Polynesian, the Hawaiian hook is the simplest and has affinity with the type in use in the Tuamotus, the Marquesas, and the Society Islands, which Buck terms the Eastern, as opposed to the Western type found in Tonga, Samoa, and the neighbouring groups, including Manihiki.

A valuable contribution is made to our knowledge of the Polynesian calendar. Stellar knowledge was extensive and was used in regulating an intricate arrangement of the lunar months. Navigation appears to have been limited to the periodical exodus of the population from one island to the other; whether the passage was made by day or by night is not recorded. Disasters occurred occasionally, and it was these that induced Gill and the native teachers to persuade the islanders to divide the population between the two atolls, and occupy both

permanently.

At one period the islands were in the grip of a most objectionable Puritanic system. Under missionary rule certain officials, the Turimen, were appointed whose duty it was to purge the community of certain 'sins' (mostly venial) by means of fines and the punishment of the stocks; as half the fine was divided among the Turimen this system fostered a mean spirit of espionage. One of the tests of a man suspected of addiction to the bottle was to order him to 'blow,' in order to estimate the sweetness of his breath. Curiously enough, I have been told by a victim that a parallel test has been applied in Samoa under the present regime of prohibition! It would be interesting to learn how far Puritanic rule survives in Manihiki and Rakahanga at the present day. JAMES HORNELL.

RELIGION.

The Shi'ite Religion: a History of Islam in Persia and Irak. By Dwight M. Donaldson, D.D., Ph.D., Mashhad, Persia. London: Luzac & Co., 1933. 393 pp.

Members of the Shi'ah often complain that Europeans

base their notion of Islam on the Sunni systems, holding that they would be more sympathetic towards it if they studied the Shi'i doctrines. Whether that result would or would not follow, it is true that the Sunni theology has received a far larger share of attention than the Shi'i, owing, doubtless, to the fact that the great majority of the Muslims are adherents of the former. Fresh light on Shi'ism is therefore very welcome, and Dr. D. W. Donaldson's book is a solid contribution to our knowledge of the subject. He has collected what is recorded about the lives of the Imams, has furnished a history of their chief shrines, some of which he has visited and photographed, has sketched the careers of the chief Shi'ite writers, and analysed some of their most important treatises. Among the authorities whom he has utilized are serious historians like Tabari and Ya'qūbī, romancers like the pseudo-Dinawari, and numerous hagiographers and devotional writers to whose works not many scholars in Europe have access. He has also taken account to an adequate extent of what has been written on the subject in the West.

It must, however, be admitted that the work can scarcely escape some unfavourable criticism. Some of its blemishes may be due to the proof-reader, some to the authorities whom Dr. Donaldson reproduces; and, indeed, since it is his intention to tell his readers what the Persian Shi'ites believe, he must not be charged with their mistakes. Hence when a Shi'ite savant is quoted for the assertion that the words appropriate to a declaration of marriage are zuwwujtoku and ankuhtoku, "both " signifying I have married thee," it is fair to attribute the shocking vocalization either to the savant or to the printer. Similarly, the variations between Sayuti and Suyuti (p. 73), Bulak and Buluk, possibly Mongol, Mongul, and Mogul (p. 173), may be laid on the broad back of the latter. There are, however, not a few statements from which disagreeable inferences might be drawn, for which the author must be responsible. Such are the designation of the third Caliph as Dhu'l-Nurin, the possessor of Lights, in lieu of Dhu'l-Nurin, Husband of the two Lights, i.e., two daughters of the Prophet; the assertion that "in A.D. 946 the Caliph "Mustakfi was blinded by the Buyid prince, Mu'izzu'd "Dayle, who set you the blinded caliph" and a Mu'izzu'd "Dayle, who set you the blinded caliph" and Mu'izzu'd "Dayle, who set you the blinded caliph" and Mu'izzu'd "Dayle who set you the blinded caliph" and Mu'izzu'd "Dayle who set you the blinded caliph" and Mu'izzu'd "Dayle who set you the blinded caliph's see al Mu'izzu'd "Dayle who set you the blinded caliph's see al Mu'izzu'd "Dayle who set you the blinded caliph's see al Mu'izzu'd "Dayle who set you the blinded caliph's see al Mu'izzu'd "Dayle who set you the blinded caliph's see al Mu'izzu'd "Dayle who set you have a see a s " Dawla, who set up the blinded caliph's son, al-Muk-"taddir, as a nominal ruler" (p. 201). The Caliph set up was al-Muti', the son of al-Muqtadir, who had been killed many years before. (P. 279) "The outstanding poets (of the Buwaihid period) were Mutanabbi and "Tha'alibi." De gustibus non est disputandum.

If there is any truth in the saying that men have always prayed at the same places, some of the shrines described are likely to have belonged to earlier cults, though perhaps the materials are wanting for inquiries as instructive in their results as those pursued by the late Mr. Hasluck in Turkey.

D. S. MARGOLIOUTH.

MISCELLANEOUS.

The Bronzes of Nalanda and Hindu-Javanese Art. By A. J. Bernet Kempers. Leiden: Late E. J. Brill, 1933.

This volume deals with the interesting subject of the influence of the art of Nalanda upon Java. The treatment is admirable and the illustrations adequate. Occasionally, however, the argument as to the sources of certain iconographic types is rather too obviously simplified, in view of the fact that an exact chronology is not always available. Similarities do not necessarily prove contacts; they may be derived from a common source. For instance, the history of the hanging end of the outer robe on the left shoulder of Buddha figures may be carried back to Gandhara. It is not distinctively Pala. K. DE B. C.

Les Sépultures chez les Prégermains et les Germains des âges de la pierre et du bronze. By Emile 1988.

Metzger. Paris, 1933. 130 pp. 195

This work appears to be the posthumous edition of a thesis on burial rites in Northern Europe which should have come down to the end of paganism. The author gives an accurate, but not particularly original or inspiring, account of the principal rites compiled for the most part from familiar sources, particularly the Reallexikon. In dealing with megalithic tombs no reference is made to Nordmann's paper in Aarböger nor to the subsequent work of Rosenberg, still less to any English authority, though it would seem improper to discuss such a theme without mentioning Peake, Perry or Elliot-Smith. Though interpretation covers many pages, hardly any ethnographic works are cited. In fact, I have found neither data nor ideas that were not already familiar.

V. G. C.

Bambuti die Zwerge vom Kongo. By Paul Schebesta. Leipzig: F. A. Brockhaus, 1932. 270 pp., 89 illustrations, 3 maps. Price 11.50 R.M.

The ingenious fabricator of the travels of Sir John Mandeville said of the pigmies "that they travail not " nor tyl the land, but have among them great men as " we are to travail for them, and they have great scorn " of these men." Dr. Schebesta's semi-popular narrative of his ethnological travels among the pigmies of the Ituri forest in the Congo strangely enough bears this out to some extent.

Without being an ethnological monograph, this pleasantly written and well illustrated book—the story, as it were, of the ethnologist's workshop rather than of his scientific results—can instruct as well as entertain. Indeed, ironically perhaps, it has a quality of concreteness and verisimilitude which gives it a scientific value. It manages to present a fairly full outline of the economic and social organization, religious beliefs and even the psychology of the pigmies, woven into the tale of Dr. Schebesta's travels among them, and of what he actually saw and heard. His pen pictures of the everyday life of his 'little folk,' of their dances famed among their negro neighbours, of the children's games, of a communal hunt with a net of creeper, and so on, are more illuminating than many a more serious work.

It is to be hoped that Dr. Schebesta will, nevertheless, give us a serious study of these very interesting people. It would be suggestive to the student of primitive economics; for these pigmies live in an economic and sociological 'symbiosis' with the negro tribes, which has wide and mutual cultural consequences. Dr. Schebesta's sympathies are clearly with the pigmies, who are not getting the best of the bargain.

M. F.

CORRESPONDENCE.

A Perforated Double-Axe of Stone from County Mayo. Gógan. Man, 1933, 132.

Sir,—I should like to compliment Mr. Gogan on his note on this very interesting double-axe, but can this in any way be called precise? "The

"precise find-spot is the N.E. angle of a triangular field adjoining the village byeway, on the land of Mr. Edward O'Toole, the finder." In 50 years, what will this reference be worth? Surely by adding the latitude and longitude taken from the 6-inch or 25-inch ordnance

map to the above it might then be called "precise," and for all time.

To give the site of finding an object in any way connected with the landowner, or tenant, is useless, and however exactly the spot may be described by verbal means, by giving the latitude and longitude also it makes the spot doubly sure and has the further advantage that it can be found on a blank map of the county concerned.

R. S. NEWALL.

Nors.—Effect can most easily be given to this suggestion by reference to the latest edition of the Ordnance Survey sheets, on which the new grid will enable the precise latitude and longitude of any point to be given. See Geogr. Journal, July, 1933, p. 42.—[Ed.]

Act of Truth.

199 Ser.—The singularly interesting case from Ceylon reported by Mr. Codrington (Man, 1933, 100) brings to light a matter of exceeding subtlety in the Cingalese mind, namely, the connection between truth as it stands evident before the public eye and the truth that comes from the tongue, the former so strongly established and incontrovertible that when appeal is made to it the deponent dares not flout it by lying. Such seems to be the psychological base of the matter, probably not consciously grasped by the people, but grown out of a general consolidation of the idea of truth; in any case it offers a subject for the study of psychologists likely to produce valuable results.

An interesting phase of the subject is the abandon-

ment of what might be termed the official form of oath —in this case Christian—which one would expect to be the most binding. This is a common event, probably everywhere; official oaths are taken lightly, they often seem to the man in the street to be part of the everyday furniture of life, imposed from above and not interiorly felt or valued. Thus Muslims will often hold in their deepest regard some local saint (well or sheikh) little known beyond his circle, yet within that circle a man swearing on his tomb will rarely lie, for the results of such lies are held to be always fearful. This indifference about officially imposed oaths is no doubt responsible for much of the perjury committed in law courts everywhere, but doubtless if a form of oath could be administered which was intimately felt by the people concerned, truth would be less often dishonoured; in the remoter parts of Egypt I have known the very old oath on bread respected when the regular ones were quite disregarded; bread, for the ancients, was the very staff of life, to be treated accordingly. Perhaps, from a psychological point of view, we may couple with this form of oath the ordinary popular one of the Near East which begins by 'by the life of '—thy father, beard, etc., or even of the Lord—life being that mysterious transcendent thing calling, like Real Truth, for deep respect; but in practice this form has become so common as to have usually no value; in one shape, however, it is still potent, when taken on the life of one's children, so nearly affecting the taker. The Copts will often prefer an oath on an actual representation of the cross; on one occasion, indeed, a Coptic member of the Parquet (the prosecuting magistrature, as in France) fell into great disgrace because he made a witness of his own faith tell the truth on a cross tatooed on the magistrate's wrist.

Derogations from the regularly established forms of oath may be considered as due to listlessness, amounting to indifference, but when we come to oaths on objects held convincedly as most sacred we often find a reluctance to swear on them founded on their very sacredness. Thus in Egypt, and, I believe, other Muslim countries, the test of the oath is often made, not on the Koran, but on Bokhari's famous collection of traditions of the

Prophet, Es-sahîh; old MSS. of this book become famous, and people will travel a long way to set up an ordeal by oath on one of them.

An interesting case, which I owe to Mr. Codrington, is that of an Englishwoman who, being shocked at 'the bad language' used by the son of a neighbour, when asked what the words were, gave the unexpected reply that he had said: 'I swear it is true, on my 'mother's grave'—a deeply sacred subject, only to be approached on the most serious occasions and, like the Bokhari (as the Muslim book is commonly called) replacing objects of higher and remoter standing. This is doubtless a common process everywhere, due to the same psychological trend that makes of high gods among backward peoples the 'otiose' beings described by anthropologists: high forms of oath may become, likewise, otiose-too far from real feeling, too high above the person concerned, to touch his inner self. The Cingalese are there others like them ?-have found what seems a surer base, if more subtle, the plain and simple Truth of Facts, tangible to all; yet would that, too, last, if once it became official?

G. D. HORNBLOWER.

Water Divining.

Sir,-In Horin, Nigeria, I witnessed an instance of what was presumably water divining by a native. It was necessary to sink a well in the compound of a small school. The school stood high in the centre of the native town, the compound was level and quite bare. The chief of the well diggers was called in, a Yoruba, but, judging from his looks, with some admixture of Hausa blood. Accompanied by two or three satellites, he stood at the entrance of the compound and looked around. He carried no instrument and made no motion with his hands. At an almost imperceptible movement of his chin, the men who were with him rushed forward and drove a stake a little way into the ground near the centre of the compound. He remarked in a casual way that water would be found at a depth of about 20 ft. (it was found at just over 22 ft.) and walked away. As it was one of the rare occasions on which I felt hostility on the part of a native, I did not like to question him as to his methods. The onlookers were interested but not awed and did not seem to regard the incident as anything unusual. My interpreter, a highly intelligent woman, said she had heard in other parts of the country of men who could find water but she could give me no details.

I would be very grateful if any readers of Man could tell me if anything has been written on dowsing among native races—so far I have found nothing myself—or if they could give actual instances of water or metal divining they may have themselves witnessed. S. LEITH-ROSS.

S. Library

Caste and Race in India (cf. Man, 1932, 316).

On4 In the course of a letter too long to be printed

in the course of a letter too long to be printed in full, Dr. G. S. Ghurye explains that the explanation of the origin of caste, quoted in the review (Man, 1932, 316) of his Caste and Race in India, "is not the whole explanation," and that in his book he has "analysed various elements which in his opinion make "up the caste system," and suggested "almost all the factors" which were advocated by the reviewer: especially pp. 28, 39, 51, 79, 91, 142, 145-7. He regrets that the reviewer refrained from comment on the last two chapters of the book dealing with the "changes that" have come about in the institution of caste as a result of the conditions created by contact with European "culture and political domination by the British," on the ground of their "political or semi-political "trend." This, however, under the constitution of the Institute, was inevitable.—[Ed. Man.]

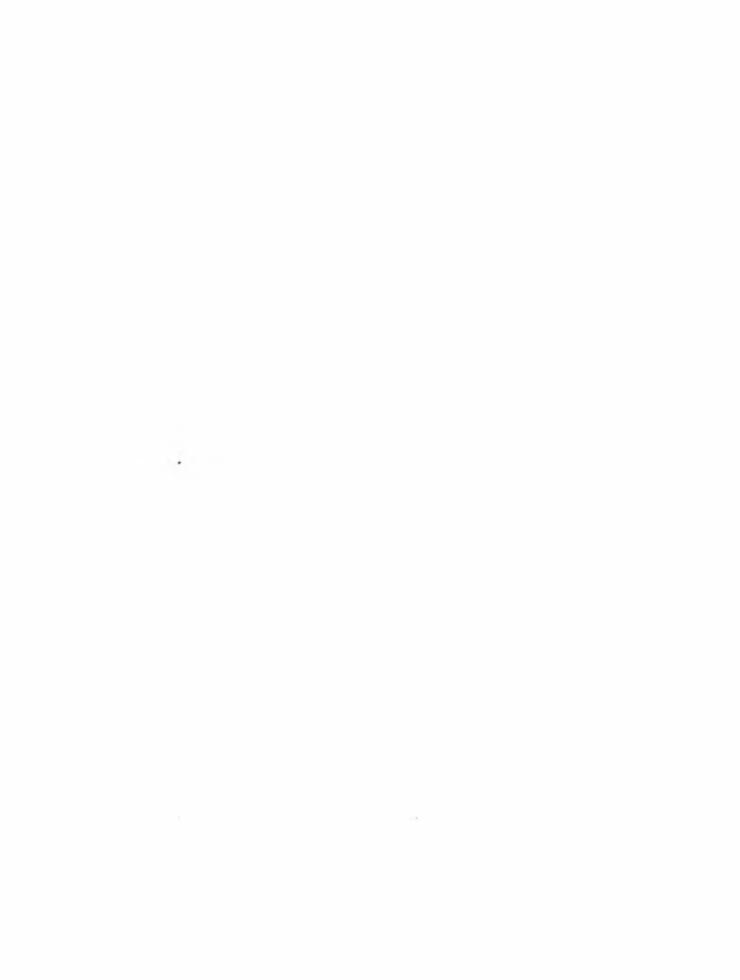




Fig. 1. COILING ON MOULD.



Fig. 2. SMOOTHING.

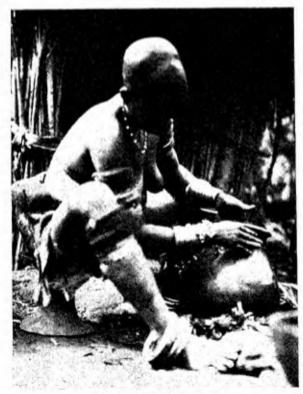


Fig. 3. Finishing NECK.

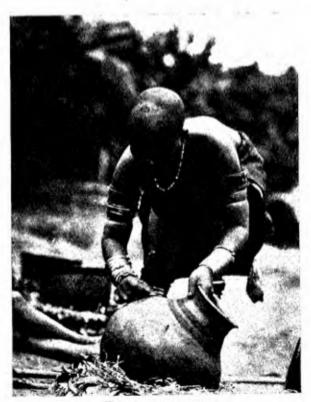


Fig. 4. BURNISHING.

MAN

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XXXIII, 202-221

DECEMBER, 1933

ORIGINAL ARTICLES.

Africa: Technology.

With Plate P.

O'Brien and Hastings.

Pottery Making among the Bakonjo. By T. P. O'Brien and S. Hastings.

The Bakonjo are a small mountain tribe living on the slopes of the Ruwenzori range in the Toro Province of Uganda. The women, both young and old, are the pottery makers, each family making its own.

The material was red clay unmixed with any other ingredient. No cleaning was necessary as it was free from stones, except for very occasional small pebbles that were noticed in smoothing and

picked out by hand.

In this particular case, the clay was taken from a banana patch above the village. The top soil, black alluvium mixed with pebbles and gravel, was removed to a depth of about 18 inches. At about one foot depth it contained old sherds of black incised ware similar to that being manufactured now. The hole was dug with a hoe and the clay carried away in flat baskets or, if only a small quantity was wanted, wrapped in banana leaf secured with fibre.

On reaching the village the clay was deposited on the ground and a lump of it taken and placed on a rough, flat stone, moistened with water from a small vessel standing near by, and pounded with

the back of a hoe.

The pots were built up by spiral coiling. A number of pencils of clay about 14 inches long and the thickness of the thumb, were rolled ready. Then an old pot of the required size was laid neck downwards on the ground, to act as a mould, and its base dusted with dry, cold ash to prevent sticking. One of the prepared rolls of clay was taken and coiled in a circle in the two hands; this was laid on the base of the mould and a second roll taken, joined and coiled on in a continuous spiral. The loose end was held in the left hand, while the right hand moved in an anti-clockwise direction with the thumb outside, and the fingers underneath and inside, pinching the coil flat, while, every few inches, the mould was given a turn to bring the work into a convenient position.

This method was continued until half the body of the pot was completed, after which, while still supported by the mould, it was smoothed in an upwards direction from middle to base. The smoother was a small split stick (kihama), of any available wood, about 4 to 6 inches long, dipped in

water, the pot also being freely sprinkled as required.

The partly finished pot was then taken off the mould and put on its own base in a shallow, circular nest of leaves and grass, and the top of the body and shoulder were built on in a similar manner to the earlier portion; the shoulder was gradually drawn in preparatory to attaching the neck. The inside was then smoothed with a broken scrap of gourd (kisusi), which was frequently moistened from the same bowl of water as before, after which the whole of the outside was smoothed with the stick. Next, the neck and rim were built up with coils and smoothed like the rest, and the rim was turned outwards and smartened off.

Decoration (manyora) was effected by a roulette (enyora), about an inch long and a quarter of an inch in diameter, with diamond patterns incised round it. One of these was made for immediate use by one of the men of the family who was idling about at the time; it appears likely, however, that the

women could also make them, if necessary. The roulette was laid on the pot and rolled round it under the first and second fingers of the right hand, from left to right, forming a band. The most popular forms of design were one, two or more horizontal bands rolled parallel round the neck and shoulder of the pot, sometimes interspaced with diagonal bands. Occasionally these bands were outlined with deeper incisions made with a stick. Other common forms were herring-bone and criss-cross markings about one and a half inches long, made with a stick immediately below the rim. Sometimes raw banana was rubbed over the pattern, which produced a whitish filling in the incisions and was intended

> to increase attractiveness and raise the price, although the effect must wear off almost immediately in use.



FIG. 5. COLLING ON BRIM OF LARGE COOKING POT.

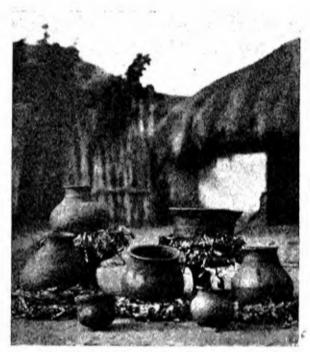


FIG. 6. SOME BAKONJO POTTERY TYPES.

After the application of the pattern, the pot was put in its nest in the open for a few minutes, until the heat of the sun had hardened it sufficiently to stand burnishing (kipiripi), which was effected with a small stone (nkulingo). These pebbles, which are very hard, were apparently obtained from the Mboku River, about 35 miles distant, and were regarded as of great value. The woman who made the majority of the pots was at first unwilling to part with hers for money, but perfectly happy to do so when offered several more which we brought on purpose from the Mboku. She refused, however, to part with her best stone at any cost, on the grounds that it was an heirloom from long ago which had been her mother's.

The pot was burnished first on the outside from the base up to the decoration, and then all over the inside. The reason asserted for this was "to make it nice," but it seems likely that it was also to make the pot more waterproof and to increase durability generally. After this it had to dry before being ready for firing. Sometimes, to assist quick drying, the pot was placed on its neck, and the base—which was thicker than the rest and so took longer to dry—covered with cold, dry ash (iju). The pottery was made immediately after market-day; it stood to dry for the intervening five days, and was fired the day before the next market, where it was sold.

In firing, four stones were placed on the ground and covered with thick, heavy reeds (ngoro)

gathered from the river and dried. These were supplemented by any other dry, heavy reeds and grass. The pots were laid any way up in this fuel, and covered with more heavy reed stems, above which were piled lighter grass and weeds. The pile was lighted and allowed to burn through and cool

off, after which the pots were ready for market. The time taken from the lighting of the fire to the withdrawal of the finished pots was two hours at least. The colour after firing was often unequal, the usual black being patched with dull red.

There are apparently no traditions or stories associated with pottery-making in this tribe, and no particular honour or the reverse attached to any of the processes. If one girl seems to take a major part it is because she is a faster and better worker than the rest.

The chief forms of these pots are large, deep, steep-sided bowls for cooking, called *ekinagha*, and large jars with a round body sloping up to a widish neck, called *eridega*. The small vessel mentioned above for holding water for pottery-making and for drinking out of, is a smaller edition of the first (*ekinagha*), and is called *kyivinde*.

Although a great deal of pottery is produced, old cracked pots are not always thrown away, but are sometimes carefully riveted with banana fibre, and used as moulds for



Fig. 7. HEAVILY DECORATED COOKING POT.

The newly-made goods are carried to the market, whence they are bought by neighbouring tribes who do not themselves make pottery, and carried away by them to their homes.

T. P. O'BRIEN.
S. HASTINGS.

Bride-Price.

Hasluck and Myres.

Bride-Price in Albania. A Homeric Parallel. By Margaret Hasluck.

In Man, 1931, 187, Mr. G. W. B. Huntingford brings certain evidence from East Africa to prove that Aristotle was wrong in saying that Greeks of the Homeric age virtually bought their wives. But Homeric parallels are, perhaps, more profitably sought in Albania, which is much nearer the Homeric scene and contains a peasant population almost as little touched as East African tribes by modern civilization. Through no fault of their own, these peasants were left till the last decade without roads, schools, or other means of communication with the civilised world at their doors, and thus have preserved a number of very old customs, including the bride-price of which Aristotle spoke. As it has hardly even been mentioned by previous writers, and seems of some importance to Homeric students as well as anthropologists, I give its details with some fullness.

1

At the outset it will be remembered that peasants and townsmen alike, Roman Catholic, Mohammedan, and Orthodox Albanians all live in communal households, each governed by the wisest of the older men in it. Marriages are the result of family arrangements between the heads of the two households concerned, and bride and bridegroom rarely make each other's acquaintance before the wedding day. The heads of the two households are seldom the actual fathers of the bride and bridegroom, but for brevity each is called 'the father' in the following notes.

 napoleons, and each payment in kind is assessed in napoleons. 'A good dog,' for instance, the mountaineers' pride, is valued at six or seven napoleons.

As there is no universal equivalent in Albanian for our word 'price,' the bride-price is called simply paret e nuses, 'the money of the bride,' as the price paid for a horse is called paret e kalit, 'the money of the horse.' It is fixed by negotiation between the two fathers, but not directly, the go-between being the man who found the bride, the lajmës 'informer,' mesatar 'intermediary,' or shkues 'messenger,' as he is variously called in the different dialects. It is always paid in instalments, the first of which ratifies the engagement, e zên nusen, 'engages the bride,' while the last is due before the wedding festivities start. As soon as the engagement is decided on, be it noted, the girl is described as nusja 'the bride' in the bridegroom's home, though to the rest of the world she remains 'a girl' (variously gocë, vajzë, çupë, etc.) till her wedding. In North Albania, where the amount payable is not stipulated at the outset, the go-between hands over the first instalment, and the bridegroom's father the others.

There is abundant evidence that the idea of buying and selling, of giving and receiving something for money, is clearly felt with the bride-price. The two fathers fix its amount after as lively a bargain as any they conduct in the bazaar, and when the first instalment has been paid, the girl is said in some places to be e kaparosme (Scottish 'arled'), 'to have had earnest money 'paid for her,' like a field, a house, or anything else bought on the instalment system. Later she is baldly described as blemë 'bought'-'cheaply' lirë in some cases, 'dear' shtrêjt in others. Some wives, too-perhaps seriously, perhaps jokingly-complain that their husbands urge them to greater efforts in the fields on the plea that they have bought them and expect their money's worth And there is the story—apocryphal no doubt, but defining the position with peasant sharpness-of the father and son who debated whether they should buy a wife for the son, or a mule. The price asked in either case was twenty-five napoleons (£20 at par), and they could afford only one or the other. At last the son said decisively, 'We'll buy a bride. She'll do as much work as 'the mule, and be my wife as well.' In some northern tribes, when an engaged girl runs away with some one else, the canonical question which the bridegroom's father must first put to her's is Pse m'a shite gruan? 'Why didst thou sell my wife?' If the latter cannot take oath with eleven other men that she ran away of her own accord and was not 'sold' by him, he is shot by the bridegroom's father. In a communal household, it should be noted, every adult tends to describe every action and every article of property, wives and brides included, as 'mine.'

Again, a poor man is known to profit financially from the bride-price of his daughter. She is supposed to expend the money on her pajë 'trousseau,' namely, the clothes she makes for herself, the bedding she makes or buys for herself and husband, and the handkerchiefs and small articles of clothing which she must bring on her wedding day as presents for her husband and his relatives; but in point of fact her father has the spending of the money. Only a well-to-do man, however, spends it all on the trousseau; a poor man puts, on an average, ten napoleons into his own pocket. A recent bridegroom, for instance, showed me his bride's trousseau the morning after the wedding, and complained that it was worth only three napoleons, while he had sent her father twenty. So, too, in certain localities only poor families pay a bride-price; the others say pridefully that they are rich enough not to 'sell' their own flesh and blood; â gjynaf t'a sheç evlad, 'it's a sin to sell your

'child,' they add.

The wedding over, the bride-price is never returnable by right. Even if the bridegroom spends only one night with his bride, humbën ato pare 'that money is lost'; i ka hangër i ati i nuses 'it has 'been "eaten" by the bride's father.' This is well illustrated by two exceptional cases known to me. In the first a young wife, Orthodox by religion, ran away from her husband, but even when she married another man, her deserted husband did not demand the return of her bride-price, but only flew to arms to avenge the insult. In the second, a man, also Orthodox, sent away his wife because she was childless, and married another. Then, pluming himself on his trimni 'fighting qualities,' he demanded the return of his first wife's bride-price, and failing its return, threatened to shoot any man who tried to marry her. His threats were pronounced unheard-of, and there was general satisfaction when they were successfully defied.

Before the wedding, rules are less simple. If the girl dies, repayment of the bride-price may be neither offered nor requested. Sometimes, however, her father is so anxious to maintain cordial relations with the bridegroom's family that he sends back the money voluntarily. Sometimes, too, an avaricious or a poor man demands its return. Indeed, in North Albania, where the Kanun 'canon' of Lek Dukagjini is followed, he has a right to one-half of what he paid before the girl's death. Her father, however, may resist the demand, saying he has spent the money on her trousseau; he may even offer the clothes to the other. 'Where can I find any money, now 'that my daughter is dead?' he asks. The other counters by saying that the clothes are useless to him, and then there is no more to be said. More often, however, the bridegroom is affianced to another girl in the same family, and then the bride-price paid for the dead girl counts as an instalment of this girl's price. Roman Catholics, however, seldom take another girl from the same family.

If the bridegroom dies before the wedding, the same results, mutatis mutandis, may ensue. If the return of the bride-price is requested, the bridegroom's father will probably say to the other, 'Your daughter is not to be married to a stranger with my money.' Occasionally Roman

Catholics affiance the girl to the dead man's cousin but hardly ever to his brother.

If the bridegroom's father breaks off the engagement, he naturally loses the bride-price he has paid. If the girl's father does so, he returns the bride-price—but the outraged bridegroom seldom leaves him long enough alive. A girl may be jilted with comparative impunity, but if a man is jilted, only death can wipe out the insult.

If the bride is seduced before marriage, she and her lover are generally killed out of hand. In an Orthodox case known to me both escaped death thanks to the civilizing influences of the modern Albanian government, but the bridegroom refused to marry the girl and insisted on the return of her bride-price. In the North both Catholic and Mohammedan bridegrooms often marry the girl after the child's birth—as they put it, they 'have given money for her' and are 'men' enough to see that she does not make another slip, once married. Some reject her, however, and

exact the return of half the bride-price, or another girl from the same family.

Only one more eventuality now remains to be mentioned. Occasionally a man raises his daughter's price at the last moment, generally because he has spent the earlier instalments on himself and has no money left for her trousseau. In such a case luen gishti 'the finger moves (on 'the trigger)', i.e., the bridegroom and his friends arm to the teeth and abduct the bride as she stands. Unless he soon makes peace with her father, he forfeits both the bride-price already paid and the trousseau already prepared, and must equip the bride himself. Nowadays, however, with the government stationed at his door instead of in distant Constantinople, and with murder often made a hanging matter, such a bridegroom generally prefers meekly to pay the extra money demanded, and then to marry the girl in the ordinary way. This happens, of course, only in Central Albania, where the bride-price is fixed when the girl is engaged.

\mathbf{H}

At least a good guess may be made, though by a rather roundabout route, at the ultimate cause of the payment of bride-price in Albania.

First of all, two exceptions to the general rule are to be noted. Orthodox peasants in South Albania and both Roman Catholic and Orthodox townsmen almost all over Albania are so far from paying a bride-price that they must virtually pay a bridegroom-price. When one of their girls marries, she must bring her husband, not only a complete trousseau, but also a substantial dowry in money or kind, both trousseau and dowry being supplied by her father. Again, nowhere do Mohammedan townsmen pay a bride-price or a dowry, and the Mohammedan peasants of South Albania paid neither till thirty years ago, when a small bride-price was introduced.

It is next to be observed that impressive parallels for both the bride-price and the dowry systems are to be found among Albania's neighbours. Thus, the Turkish-speaking Turkish peasantry of South-West Macedonia, the 'Koniar' Turks, who are the most typical of their race, pay a bride-

¹ The 'Koniars' were removed to Asia Minor in on them may be found in my introduction to the article 1924 in conformity with the pact for the exchange of on 'Measurements of Macedonian Men' in *Biometrika*, populations between Greece and Turkey. Brief notes XXI (1929).

price on Albanian terms, and the Greek townsmen and peasants of Southern Greece, who are equally typical of their race, dower their daughters. Hence some Albanians, remembering that Turkey ruled their country for more than four hundred years, and that for an even longer period all the Orthodox in Albania have been strongly under the influence of Greek culture, argue that the bride-price is a Turkish institution brought to Albania by the Turks, and the dowry a Greek institution introduced by Greeks.

But this argument does not fill the bill. On the one hand, the Albanians most exposed to Turkish influence, because nearest the 'Koniar' Turks, the South Albanians, are precisely those who are exceptional, and do (or did) not pay a bride-price, and the Roman Catholic peasants of North Albania, who always pay it, have been so little subject to Turkish influence that even the punitive expeditions sent against them by the Turks could hardly penetrate to their mountain fastnesses. On the other hand, the Roman Catholic townsmen, who dower their daughters, live in

There is, however, a social phenomenon which seems to fill the bill. The 'Koniar' Turks and the peasants of North and Central Albania, who all pay a bride-price, are incurable stay-at-homes, living and dying in the place where they were born, whereas the Roman Catholics and the Orthodox in Albanian towns, and the Greek townsmen and peasants of Southern Greece, who all dower their

daughters, are, and long have been, incorrigible wanderers.

North Albania, remote from Greek contacts.

Now, staying at home makes women scarce, and emigration makes men scarce, for the following reasons. Stay-at-homes feel free to follow nature, and marry as soon as they reach manhood. Emigrants, on the other hand, generally postpone marriage till they return definitely from their travels; only a few marry, like Odysseus, before leaving home. After emigrating some marry and settle down in the land of their adoption, and a fair number die there unmarried. Hence, roughly speaking, every stay-at-home who reaches manhood requires a wife, but a considerable number of emigrants do not.

Then again, because stay-at-homes marry on an average ten years earlier than emigrants, the number of males among them who remarry is much higher. This is a most important point in the Balkans, where enormous numbers of peasant women die untimely because of their hard work in the fields, poor food, bad housing, and utter lack of care and cleanliness in childbirth. As the Albanian proverb puts it, gruja e ka vorrin çel 'a woman's grave is always open.' The men thus widowed require housekeepers, and can only secure them by remarrying, which they do with all possible speed. But they have so few widows at their disposal that they must almost always marry girls. Whatever the country, the Balkan rule is that a widow who remarries must leave the child of her first marriage with its father's relatives, and though a woman may possibly abandon her daughter and remarry, she will hardly ever abandon her son, if only because he, unlike her daughter, is bound to care for her in her old age. Hence only girls, and the few widows who are both young and childless, are at the disposal of a widower who seeks another wife.

How numerous such men may be in stay-at-home communities, and what their remarriage means, may be seen from the following observations of my own in Central Albania.² In a chance-met company of twelve Orthodox peasants from the village of Valsh, all between the ages of twenty and fifty, one man was unmarried, two were newly married, four had been twice married, and one three times. In a similar company of sixteen Mohammedans from the village of Belësh, seven men had been married twice; polygamy is uncommon, it may be noted in passing, in this particular district. Thus between them the twenty-eight men had considerably depleted the supply of marriageable women, for they had married thirty-seven girls and three widows. Again, two Orthodox peasants near Elbasan were each widowed for the third time before they were thirty; one had married in turn two girls and a widow, and the other three girls.

high, but without much effect on the marriage market. No man can be killed in a blood-feud till old enough to handle a gun, and in Albania such a man is old enough to marry. So far as I can discover by inquiry—there are no official statistics to consult—five-sixths at least of the men so killed have been married.

² In fairness I must note that in Albania the malarial climate and the pitifully low standard of living raise the death-rate among women, and consequently the remarriage-rate among men, to unusual heights. Thanks to the greater prevalence of blood-feuds until recently, the death-rate among Albanian men also is unusually

As a result, then, of the number of men who in either case seek to marry or to remarry, there are always men vainly seeking a wife in stay-at-home communities, and women of thirty or more without husbands in emigrant communities. And since what is scarce always commands a premium, a bride-price is offered for a wife in stay-at-home communities, and a dowry for a husband in emigrant communities.

This theory is pleasantly supported by the Mohammedan anomalies we noted above. In Turkish times the Mohammedans of Albania were favoured by the government, and many found employment, the townsmen as officials and the peasants as gendarmes and the like, in Albania itself or in other parts of the Turkish Empire whence they could visit their homes and wives. Hence, those who had to emigrate farther afield and to postpone marriage were only numerous enough to keep the sexes balanced. A similar phenomenon still exists among the Christian Greek and Bulgarian peasants of South-West Macedonia, where emigration is less general than in Greece, because many men find remunerative employment as masons near home.

As some writers hold that bride-price in general is often exacted because the bride's work in the fields has an economic value which her father does not wish to resign without compensation, it is interesting to note that these Greeks and Bulgars of Macedonia say the value of the bride's work alone exempts her father from paying the bridegroom, as it were, to marry her, and they definitely call it her 'dowry' (Greek $\pi\rhoo\tilde{\imath}\kappa a$; I do not know the Bulgarian term). Its value is priced in another way; the bride's father often retains her services till she is over twenty, and then she must marry a lad several years her junior because the men of a more suitable age are already married.

Hence I would suggest that the bride-price was adopted thirty years ago by the Mohammedan peasants of South Albania because of some diminution in emigration among the men rather than the growing poverty to which they now ascribe it, for poverty did not increase in Albania till the change-over in 1912 from Turkish rule to independence. But for the moment I cannot trace the suggested diminution.

Mr. Lef Nosi, of Elbasan, informs me that a passage in the Greek periodical Aaoypa¢ía states that Christian Greek peasants in Thessaly buy their brides. If so—writing in Albania, I cannot trace the reference—it favours the emigration theory, for till recently these Thessalians were practically serfs tied to the soil on which they were born.

Finally, one remembers that the great days of Greek colonisation had barely begun when Homer wrote, and one wonders: Was the bride-price of his time destroyed by the wave of colonisation that swept the country afterwards?

MARGARET HASLUCK.

Homeric and Albanian Bride-Price. By Professor J. L. Myres.

Both Mrs. Hasluck (Man, 1933, 203) and Mr. Huntingford (Man, 1931, 187) have 204 compared with modern bride-price and dowry customs the Homeric usage; but neither of them has noted that Homeric usage varies. This variation was discussed many years ago by Paul Cauer Grundfragen der homerischen Kritik 1895 (2nd ed. 1909, 3rd 1923).

First as to bride-price:—Hector married Andromache "out of the house of Eëtion, when he provided great hedna" (ἔδνα, Il. xxii, 472): Iphidamas "gave much" not to the bride, but to her people (xi, 243; cf. Schol. Il. xiii, 382, "for they received the ἔδνα from the suitors"): Odysseus' sister "they gave away to Samè and received countless wealth" (Od. xi, 367): and so forth (Il. xvi, 178, 190; Od. xi, 282, xviii, 278). These ἔδνα were returnable on demand if the bride was unfaithful (Od. viii, 317–9). They could be commuted for services, as with Laban and Jacob (Od. xi, 288; Il. xiii, 366) or remitted altogether (Il. ix, 146, 288), and a penniless but desirable suitor might even be given house and lands by the bride's father (Od. vii, 313–4) though these are not called hedna. So far, Aristotle is supported by Homeric passages when he says that in early times Greeks "bought" their wives from one another." (Politics II 5 (8), 1268, b 39.)

But there are references also to downy given by the bridegroom to the bride (Od. vi, 159) and this was the interpretation given to hedna by Aristonicus, on II. xvi, 178; and Apollonius and Hesychius distinguished $\tilde{\epsilon}\delta\nu a$ and $\phi\epsilon\rho\nu\dot{\eta}$, the suitor's courtship presents, from $\mu\epsilon\dot{\iota}\lambda\iota a$ (meilia) wedding presents from the bride's parents (as in II. ix, 147), and further identified $\tilde{\epsilon}\delta\nu a$ with $\pi\rho\sigma\dot{\iota}\xi$ (pro $\tilde{\iota}x$) the post-Homeric word for a downy.

Cauer thought that this difference of usage betokened a different source or date for the passages; and quoted a similar transition from one usage to the other in early Germanic law: F. Dahn, Deutsche Geschichte I, 1 (1883), p. 135: Bartsch, Die Richtstellung der Frau als Gattin und Mutter 1903, p. 62. Tacitus (Germania, 18) says that the bridegroom gave presents (dotem) to the bride, but that the relatives supervised the transaction, intersunt parentes ac propinqui, ac probant munera (compare Od. xviii, 278, where a well-behaved suitor should feast the bride's friends): in haec munera uxor accipitur, though she herself gives a present to the bridegroom, invicem ipsa armorum aliquid viro adfert. But in Frankish times the custom grew, of making these hedna—cattle, horse, weapons—into a phernê or dowry: R. Schroeder Lehrb. deutschen Rechtsgeschichte (1894), 291, 300, 699. And it is possible that in Homeric society the bride-price may have been handed over to the bride as dowry, in which event, if the bride was unfaithful, the husband would send her home without it, as Telemachus was advised to send home Penelope, if she insisted on marrying again while Odysseus' fate is uncertain: it would then be for her own people to find her hedna "such as fitly follow a "dear child" (Od. i, 275-8).

In this last instance hedna is clearly used for a dowry or pherne provided for the bride by her

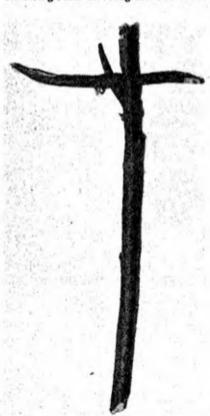
own people, as in the exceptional cases (Od. vii, 313-4; Il. ix, 147) already quoted.

From Mrs. Hasluck's Albanian instances, however, it would not seem to be necessary to presume more than differences of an economic or personal kind, to account for such variations of usage as are found in Homer.

JOHN L. MYRES.

S. America: Magic.

Throwing-Fork for Magical Use from the Toba Indians (El Gran Chaco). By Stig Rydén, Göteborg.



THROWING-STICK FROM THE TOBA INDIANS.

Scale 1/4.

During a sojourn among the Toba Indians at the mission station "El Toba," at Sombrero Negro, a village on the Argentine shore of the Pilcomayo, at the exact point where the Tropic of Capricorn crosses this river, I obtained the object shown in the accompanying illustration from an Indian. It consists of two sticks, one of which is forked at one end. Below the fork a string of caraguata forty inches long is tied, the free end of which is wound round the other stick without being tied. This smaller stick is held tight in the fork, as is shown by the illustration, which also shows its size.

The Indian who added this object to the ethnographic collection I was making for the Göteborg Museum told me that the medicine men of the tribe used to make these throwing-forks whenever it rained too heavily and too long. They were always made of a kind of wood called nelomik in the Toba language. The medicine man would go out to the open space in front of his dwelling with this object in his hand and swing it vigorously forwards and upwards. This released the stick held in the fork, and the string wound round the stick caused it to rotate in the air with a sound similar to that of a bull-roarer. This action was repeated several times, and it was believed that the medicine man in this manner could bring about a change in the weather. No further information could be obtained regarding the ideas connected with the use of the throwing-fork, which is called tsamama in the Toba language. Another Indian questioned by me regarding the object stated that it was a child's toy. He knew nothing about its magical use described above.

So far as I am aware, a similar object is to be found

only among the Aparai Indians, who live on the Paru river in north-eastern Brazil, near the sources of this river on the boundary of French Guiana. Speiser, in this book, 'Im Düster des brasilianischen 'Urwaldes' (Stuttgart, 1926, Fig. 78:16), has depicted a "Steinschleuder," the construction of which is entirely similar to the Toba Indian implement described above, the one difference being that an oval stone is held in the fork, instead of the stick. The explanation of this difference, which has compelled me to use the term throwing-fork instead of the German name (which would convey a wrong impression in this case), is that there are no stones in El Gran Chaco. No information is given regarding the use of this object by the Aparai Indians. I am inclined to believe that its original use by the Toba Indians was for magical purposes, but that it has become a plaything, owing to the gradual loosening of the traditions of the tribe. It should, however, be mentioned that I never saw it used in the daily life of the village.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Some Aspects of Primitive Dancing from the Southern Sudan. Summary of a Communication presented by Dr. A. N. Tucker, 24 October, 1933.

To the casual observer there is a great degree of sameness about African dancing. One sees usually a circle of men and women gathered round a drum or collection of drums. jumping about and yelling, apparently with little or no regard to rhythm—and that is all, except that the performance is protracted far beyond our limits of physical endurance. If one watches more closely, one might observe that at certain times, for example, the men will carry spears, at other times they will put their spears aside, or that sometimes they will dance with women partners, at other times not. But even this seems quite haphazard. To understand a dance properly, one must know beforehand, from one of the natives themselves, the form or forms that the dance takes, and then one can attend and look out for the important aspects while ignoring what is not relevant. For in African dancing, much is left to individual inspiration, which does not come within the main pattern of the dance. A changing rhythm in the drums usually heralds a new phase in the dance. Here again, however, the drummer adds his own characteristics to the accepted drum rhythm, which must be deducted, else one becomes confused between actual rhythm change and individualities on the part of the drummer. And when, at last, one is able to analyze a native dance at all thoroughly, one is astounded at the amount of technique, quite as complicated as that in any branch of European dancing, that goes to make up the African dance.

The only dances which I have analyzed in any detail are those of the Nilotes—Shilluk, Nuer, Dinka. I have already published a fairly complete analysis of Bari dancing, but have no photographs or films to show here, the Bari dancing almost exclusively at night.

SHILLUK DANCES.

To begin with the Shilluk, these people have two main dances, the bul, a social dance, and the yuok, a funeral dance. Both take place in the afternoon, though the bul may also be danced at night. (Bul merely means "drum.") The dancing attire is characteristic for each sort of dance, so that one can tell at a glance by merely looking at the dancers as they approach the village what dance is in progress. For the bul one carries spears and a dancing shield, and winds a string of small bells round one's legs, from ankle to knee. For the yuok one carries a large oval shield in addition to spears, and attaches a large cow-bell to one's elbow, if procurable. On the whole there is perhaps more painting of the face, especially among the women, for the bul. In the yuok women are allowed to carry spears. The orchestra is also different. In the bul the drums, a big one and a little one, are suspended horizontally, about five feet from the ground, in a sort of artificial grove of saplings, peeled in rings. In the yuok the drums lie on the ground, and, when not in use, are covered by shields.

In both dances there is a cycle of phases underlying the characteristic efforts of individuals.

In the bul the sequence is as follows :-

Camo yai: The men march round the open space with their spears at the slope, singing in chorus, while horns are blown; tha bul: the men face inwards on the drums, and jump; yai followed

by awat, which is like the yai; tha bul, after which the men put aside their spears, and the girls choose their future partners. This is done by walking up to the men and rubbing shoulders with them; kep: like the tha bul, only the men have no spears; mi kele man: this is the most important part of the dance, when men and women jump together; yai (marching); tha bul (jumping); man (partners); kep (jumping); man (partners), by which time all are too exhausted to continue. This order of procedure may be broken into at any point by the arrival of a dancing team from another village, when a sham fight takes place.

The yuok sequence is as follows: yai as in the bul; wuco: the men crouch ($ki \in no$) behind their shields, and then suddenly attack, clapping their spears on their shields; tha bul: face drums and jump; awat; aya or $yi \in ko$: a high prancing step; yai, after which the sacrificial bullock is killed; abiet: the men raise their shields above their heads and march out of the village, singing; aya: the women now have control of the drums, which they beat in a 5/4 measure, and dance slowly round,

carrying spears, till the men return for the yai.

NUER DANCES.

There are three important Nuer dances, the dom piny, the bul, and the thom. The forms of dancing indulged in for each are very similar. There are two main movements: giek or duth: in which men and women advance and retreat, dancing at each other; yuor: a sham battle between two sides, incited by the kiit (song-leader). There are two other movements, which only are to be found in the bul. These are: rau: in which the men jump up and down, singing each one the praises of his favourite bull in a sort of saga called twar, while the women reply with a song called yet; ciok or $\eta weng$: here the men jump high into the air, or include in mimic combat, even pretending to die occasionally. This is usually introduced by a song which all sing crouched down.

The orchestra is an interesting feature in Nuer dancing. In the dom piny it may be called a combination of stretched string and percussion. The dom piny is danced only at night during the dry season at the fishing camps. It starts with the bil thoaam: a solemn chorus in which the men raise their spears, followed by giek; then yuor. The thom is a sunset dance, composed of giek and yuor. It also includes a Dinka-like step called the wany jak, in which the dancers seem to limp. The bull

is usually danced on important occasions, such as weddings.

DINKA DANCES.

There are many steps among the Dinka, but, so far as I could make out, there is no fixed programme of steps in any dance. The following are the most well known: Agar and Malwal: hands up and stamp right foot. Cf. Nuer wany jak; ator: stamp each foot twice; ru wen: jumping and flicking stomach; Lor nhial: high slow jumping.

A Taposa age-class dance, a Lohoya harvest dance, and a Zande witch-doctor dance were also discussed.

Each aspect of the dances was illustrated by means of an epidiascope, and a ciné film was shown to illustrate the dances as a whole.

An Early Mesolithic Site at Broxbourne, Sealed under Boreal Peat. Summary of Communications presented by S. Hazzledine Warren, J. G. D. Clark, H. and M. E. Godwin, and W. A. Macfadyen, November, 1933.

The paper described an Early Mesolithic site that is associated with a former sandy land surface, now buried beneath peat that underlies the present marshes of the Lea Valley. Below this buried land surface there is a richly fossiliferous deposit with a well characterized flora and fauna of the Tundras, generally known as the 'Arctic bed,' that belongs to the closing stage of the Pleistocene. Pollen analysis of the overlying peat indicates that it belongs to the Boreal period: thus the industry is placed in the middle of a clearly dated sequence.

Taking the former (sub-peat) land surface as a whole, flint artefacts are extremely scarce, and the evidences do not suggest occupation of the area concerned by a settled population. There are intensely concentrated groups of flint flakes and implements, only a few yards in diameter, associated with much evidence of fire. The area of such a site could scarcely accommodate more than half

a dozen to a dozen persons, gathered round their camp fire.

The more important of these sites that has so far been located yielded 22 examples of the so-called micro-burin, which is probably a waste product in the making of the microliths, of which there are 25. The latter are for the most part of the narrow, pointed form, while the geometrical Tardenoisian types are absent. Besides large numbers of good flakes and fluted cores, there are some true gravers, many small scrapers, and one or two crude axes. Notably, there is one particularly good example of the Duvensee type of core-axe with tranchet edge.

The flint industry as a whole is closely allied to those dating from the same period in Sjaelland (cf. Svaerdborg, Holmgaard, etc.) and in North Germany (cf. Duvensee). It has been discovered elsewhere in the lowland zone of England (cf. Thatcham), but never before in such a satisfactory context. Unfortunately no bone objects were recovered, but from deposits of comparable age in this country bone harpoons with Baltic affinities have, of course, been found (cf. Holderness and the North Sea).

Taking into account the position of the site in the climatic history of the country (that is, with the Tundra below, and the Boreal forest stage immediately above) it is considered that Broxbourne may be taken as a type station for the Early Mesolithic in south-eastern England.

British Columbia Coastal Indians—Their Blood Groups and Physiognomy. Summary of a Communication

presented by Professor R. Ruggles Gates, F.R.S., 21 November, 1933.

Questions of the relationships of British Columbia Indians to Asiatic peoples led to the blood grouping of 300 of the older Indians belonging mainly to the Kwakiutl but also to the Haida, Tsimshian, Salish and Nootka, by Dr. G. E. Darby. Many photographs were also taken. They show that there has been much intermixture with Europeans. Nevertheless the blood groups are still low in A and B, i.e., 86.7 per cent. 0, 12.7 per cent. A, and 0.6 per cent. B, indicating that originally these Indians, like those in other parts of North and South America, were originally all 0.

In the pedigree of one "Indian" family the A blood group has been inherited through four

generations. Occasional crosses have taken place with negroes and with Japanese.

Recent studies indicate that "peripheral" peoples, such as the Australian aborigines, the Bushmen, Maoris and Lapps, originally had 30-40 per cent. A but no B. This supports the view that the A blood group is older than B, since it is much more widespread in primitive peoples. This makes it more difficult to understand why a people such as the Indians, whose irruption into America is believed to have been approximately post-glacial, are practically all 0 when of pure blood. The screen of islands stretching down the Asiatic coast from Sakhalin to Formosa and Borneo contains primitive peoples, such as the Gilyaks and the Tso, who strongly resemble the Indians and who are much lower in A and B than neighbouring tribes or the peoples of Eastern Asia. Such tribes are probable ancestors of the Indians. Their relative isolation would prevent their being highly contaminated with A and B.

It is pointed out that repeated dominant mutations from 0 to A or B are necessary to account for the spread of the blood groups in the apparent absence of selection. Migration and mingling of peoples are also necessary to explain the blood groups as they exist in modern populations.

The Cretan Labyrinth. A Retrospect. Summary of the Huxley Memorial Lecture delivered by Professor

J. L. Myres, O.B.E., F.B.A., 28 November, 1933.

A retrospect of the course of discovery in Greek lands since the first exploratory journey of Heinrich Schliemann to Ithaca, Mycenæ and Troy in 1868 illustrates the dependence of such research on political and other extraneous incidents, and on the advance of knowledge in other fields of inquiry. Results of originally separate excavations have been gradually brought into coherence by many smaller finds, and especially through their regional distribution. Fresh methods of analysis present familiar facts in new associations and modify their significance. And the growing conviction that what is needed is not so much more excavation, as excavation more systematically directed to crucial sites, and particular problems, economizes time, effort and expenditure.

Main periods within the sixty years here reviewed are marked by the establishment of approximate limits of date for 'Mycenean' antiquity about 1890; the political liberation of Crete in 1898, permitting large-scale excavations at Knossos and on other 'Minoan' sites; the revelation of non-Minoan cultures

at Orchomenos (1903), in Central Greece (1902), and in Thessaly (1902–12); the belated examination of lower levels at Tiryns (1912) and of neglected tombs and buildings at Mycenæ (1920); the exploration of Macedonian sites from 1917 onwards, and the new opportunities for research in Asia Minor and adjacent islands such as Lesbos, and in Palestine, Syria and Iraq. Among the various new lines of inquiry suggested by recent contributions from adjacent regions, the old question as to the sources of Minoan originality remains nevertheless unanswered.

Human Biology.

The Status of the Kanam Mandible and the Kanjera Skulls. By Lr. L. S. B. Leakey: 20 October, 1933; Professor G. Elliot Smith in the chair. Convener: Miss M. L. Tildesley.

Dr. Leakey began by referring to the fact that in March of this year a conference organized at Cambridge by the Human Biology Convener of the Royal Anthropological Institute considered all the evidence concerning the age of the fossil human remains brought home by his expedition from East Africa, and a unanimous report was issued at the conclusion of the conference (Man, 1933, 66). In this report the age of the mandible fragment from Kanam, which was associated with a "pre-" Chellean" pebble industry and an archaic fauna, was accepted as Lower Pleistocene. The Kanjera skulls, which came from a somewhat higher horizon and were associated with a later fauna and more developed culture (the topmost stage of the Chellean), were accepted as of Middle Pleistocene

It was emphasized that these dates were based upon three lines of evidence, geological, cultural, and faunistic, and that, had the fauna been the sole guide, a Pliocene age might have been assigned

to the Kanam mandible.

At Cambridge an anatomical committee reported that the Kanam mandible might be considered provisionally as Homo sapiens with the possible exception of certain characters which were noted. In the subsequent study carried out by Dr. Leakey he paid particular attention to these characters, notably the apparently large pulp cavity in the root of the first molar on the right as shown by a cut section; and also the conformation of the inner aspect of the mandible. He had the help of X-ray work carried out for him by Professor Harris of University College and by Mr. Done of Kodak Medical Research Department. As a result of his investigations and of comparison with much modern material, Dr. Leakey expressed the opinion at the meeting on October 20th that the Kanam mandible must be regarded as a new species of Homo for which he proposed the name Homo kanamensis. He based this view on the nature of the roots of the molars and premolars and also the nature of the pulp cavities as shown by skiagrams. He emphasized that, nevertheless, the Kanam mandible in many ways approached primitive Homo sapiens very closely, and said that Homo kanamensis should be regarded in his opinion as a true ancestor. He also recorded that a section in the region of the symphysis showed its great thickness to be due to a pathological growth on the inner surface. This had been examined by Sir Arthur Keith and Mr. T. W. P. Lawrence, who provisionally diagnosed it as an ossifying sarcoma, though closer study

would be needed for a final opinion.

Dealing with the Kanjera skulls Dr. Leakey discussed the reconstructions which were made, independently of each other, of the two skulls known as Kanjera No. 1 and Kanjera No. 3, their surviving parts being roughly complementary. Both skulls are long and narrow, the lengths being approximately 207 mm. and the indices 67 or 68. He pointed out their infantile and unspecialized characters, such as the very poor development of superciliary and supra-orbital ridges on skulls which in other ways were massive and with heavy scars of muscle attachments. The skulls were very thick too, and the structure of the diploë like that in the Piltdown skull. The brain cast of No. 1, the most complete, was simple but otherwise not incompatible with Homo sapiens. Dr. Leakey expressed the view that these skulls were definitely to be regarded as very early and generalized examples of Homo sapiens.

A femur fragment associated with Kanjera No. 3 was described as having a typically *Homo sapiens* section in the pilastric region, but with a pilaster development comparable to that in skeletons of Upper Pleistocene age such as Cromagnon. The femur fragment supported the diagnosis of the

Kanjera humans as Homo sapiens.

Dr. Leakey went on to remind his audience that these human remains from Kanam and Kanjera were associated respectively with two of the stages in the development and evolution of the coup-depoing culture, and that they showed us for the first time what the makers of this great and well known culture were like. Several people had already postulated that the coup-de-poing culture was to be attributed to Homo sapiens and this had now been established at least for East Africa. It appeared not improbable that Africa was the home of origin both of the coup-de-poing culture group and of the Homo sapiens branch of the human family.

Professor Elliot Smith then opened the discussion from the chair. He stressed the importance of Dr. Leakey's discoveries and researches and congratulated him on his most valuable results. Referring to the endocranial features of the Kanjera skulls he said that the form of brain of the most primitive members of the human family, including Sinanthropus, does not mark them off absolutely from the rest, for this can be paralleled in individual cases in Homo sapiens. But visual stimulus had acted as a strong incentive in the development of the human brain, and where the visual areas of the cortex usually showed a prominence in Homo

sapiens, there was a depression in Sinanthropus, which was also to be observed in the Kanjera skull. The thickness of the latter was approached by a specimen from New Zealand which he exhibited.

Dr. W. L. H. Duckworth referred to certain characters in the Kanam mandible which Dr. Leakey had thought of significance at an earlier stage of his studies, namely the low relative position of the mental foramen (an instance approaching this had been found in the skull of a modern negro), and what, from the section alone, might have been a taurodont first molar, but had been shown by skiagraph to be an anterior root cut aslant.

Sir Arthur Smith Woodward said that geologists and palæontologists were satisfied that Dr. Leakey had proved his case as to the high antiquity of the fossils, and he had now shown that they differed hardly at all from Homo sapiens. This was a most startling discovery. In Europe Homo sapiens was only known in association with tools of considerable variety; here he was associated with the most primitive of human tools.

Professor P. G. H. Boswell stressed the advisability of obtaining the supplementary geological and palæontological evidence referred to in the geological report of the Cambridge conference. He also mentioned the current confusion as to the dividing line between Pliocene and Pleistocene; at present in Britain geologists put it at the top of the Cromer Forest Bed, but where did Dr. Leakey

Dr. Leakey said that the lack of agreement among geologists had made it necessary for him to select his definition, which was, that true equus and true elephant were the criteria of Pleistocene as distinct from Pliocene. If Cromer Forest Bed were regarded as marking the limit of Pliocene, the Kanam mandible was Pliocene.

REVIEWS.

FOLKLORE.

Le Folklore du Dauphiné. (Isère): Étude descriptive et comparée de Psychologie populaire.

By Arnold Van Gennep. Librairie Orientale et Americaine. G.P. Maisonneuve. Paris, 1933.

8vo. 792 pp. 2 Vols. 8 maps.

Van Gennep's monographs on the folk-lore of Savoy have familiarized the plan and procedure of the present work on the Dauphine. The material was gathered on the basis of questionnaires (it is regrettable that they are not given in these volumes), largely through the co-operation of correspondents, and it is presented as far as possible, in the raw state. The procedure is justifiable, in so far as the aim has been to establish a norm, a survey of characteristic types of behaviour; and the result is a body of exact detail. Van Gennep earlier criticized the method of random soundings, and an exposition of his own principles, entailing vast labour and precision, would have been welcomed for its own sake, even had not the same principle been justified in the field of dialectology. One of the immediate uses of regional mapping, as it stands here, is in determining more precisely where an obsolescent trait might reasonably be supposed to have existed, when comparative evidence alone would have been insufficient ground for the supposition (e.g., marriage customs, p. 153 passim and cf. p. 371, etc.). But to appreciate the full value of maps and of cartographic analysis, parallel demo-graphic charts are needed; that is, details of population and of relations between commune and commune, by kinship, settlement, intercourse of various kinds, etc. I am not aware that a survey of this kind exists for the Dauphiné. In the present work a rough idea of frequency only is given in particular cases.

The sub-title of the book must be rather loosely understood. The method followed is not in the strict sense psychological, for in psychology applied to folk-lore the individual and the aberration from standard tradition are as important as the type case. Hence the restrained, brief remarks, by which the data are linked up with comparative folk-lore, lack conviction. That is to say, the theoretical side of the work is abstract, not experimental. The final aim of these local studies is to control the general theory of passage rites, to illustrate it within limits of time and place. The facts have been grouped with this schema in view. Here and there a contrast

is made between the application of animistic interpretations, etc., and that of the basic social and socialreligious theory. The latter is generally far more attractive, but it is accompanied by no special study of psychological behaviour within the sphere of this local tradition, seldom by any attempt to discover the actual objective reality, that is, the concept that exists or the aim that motivates in the performance of any customary practice—a difficult matter to determine, when it is realized that the peasant is as apt to reconstruct his attitude to suit his behaviour as much as his behaviour to suit his ideas or needs.

Thus on p. 126 a magical purpose is rejected in the arrangement of the marriage procession (i.e., magic circle, etc.), in favour of a sociological symbol (formation of a new social unit). It must always be left to the regional specialist to decide purpose for a particular case at a particular moment; but the sociological explanation cannot be arrived at on general grounds. magical etiologies be considered as non-fundamental, elsewhere the procession is regulated by conventions of behaviour among the members of existing groups. The evidence for magic is negative for Isère, however, and the point will be worth investigating in other localities. Again, on p. 329, Van Gennep shows that St. John's fires were at no time replaced by a custom of burning faggots outside individuals' houses; in parenthesis he adds: "car ce serait transformer un rite "collectif en un rite individuel." This general argument must be challenged, since the frequency of such transformation in the growth of custom is typical of the accumulation of private magical acts from ceremonial of all kinds; while initiation and burial ceremonies, and feasts such as the Jewish Feast of Tabernacles, for instance, show a tendency in general to become less and less collectivist, and more and more private or domestic.

The book is easily the most important contribution to folk-lore of recent years; not so much because of the nature of the material as on account of a scientific thoroughness that once again sets a high standard in a study that is so often accused of dilettante antiquarianism. As was to be expected, the distinguished author has made even the driest recapitulations readable and provocative. There is given as nearly as possible a complete picture of local life and custom, and it is particularly interesting to note the place of tradition

under modernizing influences. While in some cases ancient custom appears in a very emasculated form, in others there have been post-war revivals from the past, while the use of agricultural machinery, for instance, may only slightly have modified ceremonies such as those of the last sheaf, or the corn goat. Perhaps the most interesting material is that of the ritual and agricultural year, which adds much to the stock examples of harvest, sowing and vintage ceremonies, and shows that the last word on the subject has not yet been said. The treatment of childhood and adolescence and the discussion of age groups also contain new material and sound criticism. The side of popular literature is The folk-tale is interesting, perhaps, singularly arid. on account of the influence of written literature, etc. There are some useful specimens of dialect, but several of the examples are recorded in the literary language The folk-song is very near vanishing or in resume. point.

N. AMERICA.

Contributions to the Geography of Baffin Land and Melville Peninsula, and Contributions 212 to the Physiography of Southampton Island.
By Therkel Mathiassen. Report of the Fifth
Thule Expedition, 1921-24. Vol. I, No. 2, pp. 102,
and Vol. I. No. 3, pp. 39. Copenhagen. 1933 and 1931.

These Reports give the geographical results of the Fifth Thule Expedition's work in Melville Peninsula and N.W. Baffin Land, and of Therkel Mathiassen's enforced stay on Southampton Island. Relevant details

are added from pre-existing publications.

The following maps are included: North Baffin Land and Melville Peninsula (lat. 65° 30′ to 74° 00 N., long. 72°00 to 92°00 W.) on a scale of 1: 1,500,000, which includes many newly-recorded Eskimo place-names; an Eskimo map of Cockburn Land; a very general geological map of N.W. Baffin Land and Melville Peninsula on a scale of 1: 3,000,000; and Southampton Island, 1: 1,500,000, on the outline of Capt. Comer's map of 1910, with information added from Mathiassen's observations, earlier records and local Eskimo knowledge.

The Reports consist chiefly of descriptions of the topography of the coastal areas from Ponds Inlet to Murray Maxwell Bay (by way of the north-west of Baffin Land, which is known as Brodeur Peninsula), of the north and east coasts of Melville Peninsula, and of the topography of much of Southampton Island. There are good bibliographies. The photographs, in common with most collections from such climates, vary in im-

portance and success.

The main value of the Reports is in the detail of formation contained there. While this is not intrininformation contained there. While this is not intrinsically of very great interest, it is of the utmost importance to forthcoming expeditions of express scientific purpose whose destinations depend on geographical factors. For instance, a detailed study of the fossiliferous sediments of the Arctic Islands promises very considerable advance on the present knowledge of Palæozoic rocks in the North American Continent; an expedition with such a purpose would, in laying its plans, profit greatly by studying these Reports.

The Report's chapter on geomorphology (vol. I, no. 2) falls far short of being a study; but the observations made on the journeys, where much had to be sacrificed to the necessities of existence, not the least of which was speed, might well serve as a basis of plans for a geomorphological expedition here. In this science, while many indications can be gleaned from unpro-fessional descriptions, no certain conclusions can be reached without a visit to the area under consideration. The recent work of H. C. Cooke1 on the physiography of N.E. Canada exemplifies the order of result that might be expected from intensive work by an expedition in an area such as is described in these Reports.

It is to be hoped that the prospect of such work being commenced soon is not remote, but whatever results are forthcoming considerable acknowledgment will always be due to these admirable reconnaissance journeys of Mathiassen and Freuchen. IAN COX.

213 By Knud Rasmussen. Pp. 350; numerous plates. Report of the Fifth Thule Expedition, 1921-24, Vol. IX. Copenhagen. 1932. Kr. 12. This Report is so full of hitherto unrecorded facts

and correspondingly devoid of theory that its reviewer becomes the most interested reader. Nor do I suppose that its full value will become apparent until a comparative account of all the Eastern Eskimo cultures is

It concerns itself very largely with the Umingmaktormuit (Musk-Ox) group of the Copper Eskimo, which Dr. Rasmussen studied on the island of Malerisiorfik (south of Kent Peninsula). The Musk-Ox people inhabit an area further to the west than any other eastern Eskimo group; hence their language, which is fundamentally the same as that spoken right across the islands eastward as far as Greenland, differs essentially from that of the Western groups. Dr. Rasmussen found these people possessed of a high standard of Eskimo culture, but, he writes, "more characteristic . . . than " anything else is their temperament, their inflammable " mind and the peculiar manner in which this is reflected " in their songs and tales. Of all those I have met they " are the most poetically gifted and their songs are not merely restricted to epic accounts of hunting adventures and achievements of which they are proud; in addition, they have a genuine faculty for moulding sentiment into words, an art that is rarely met with " in these regions."

Thus the greater part of the Report is made up of songs and folk-tales, set down with the original Eskimo written phonetically, a literal translation and a summary "As singers and interpreters of the old " spirituals the Musk-Ox people were really outstanding "—as poets perhaps the most gifted and inspired Es-"kimos I have ever fallen in with. Their store of legends, " on the other hand, was only small. . . . I have included every thing that was told me, even the very slender and apparently insignificant fragments, for some day they may be useful variants and as a comparative material." The care to include such detail is an excellent characteristic of all the Thule Expedition Reports that the reviewer has been fortunate enough to read.

Other chapters treat of the Cycle of occupation and distribution of population between Queen Maud sea and Bathurst Inlet, games, string figures, a list of words of the Musk-Ox people, and a comparison of some Musk-Ox words with those of the Kangerjuarmiut, the people living around Minto Inlet, Victoria Land.

It is unfortunate that, since a translator was employed to render the work into English, several errors of the Danish compositors remain, and also that pages 86, 88, 89, and 91 appear completely blank; the index suggest that two of these should be occupied by sketch-maps. The photographs are exceedingly good.

Dr. Rasmussen is to be congratulated on this admirable account of so interesting and pure a group of Eskimo people. IAN COX.

The Eskimo: Their Environment and Folkways. By E. M. Weyer, Jr. Yale University Press, 1932. Price 30s.

This is a very full account of the economic, social and religious life of the Eskimo collated from the many field studies made in various parts of their terri-The great bulk and the scattered character of Eskimo literature have long made such a study necessary, and Dr. Weyer, after field work among the Alaskan Eskimo, has set himself this difficult task. His attitude towards sociology derives largely from the work of Sumner and Keller, which has received but little notice in this country, although it anticipated much of the functionalist point of view. A great part of the book is devoted to a detailed comparative survey of Eskimo religion, while material culture is largely neglected. This, although a logical consequence of the general plan of the book, is unfortunate, more particularly since over 100 pages and many useful distribution maps are devoted to an analysis of the habitat to which the material equipment was so ingeniously adapted.

Dr. Weyer has shown great skill in the manipulation of the enormous mass of data and despite the wealth of reference and quotation the text remains readable, the salient characteristics and interrelations are well brought out and the indexing and referencing are most efficient. There are useful maps of settlement sites for all areas save Greenland.

C. D. F.

MISCELLANEOUS.

The Frazer Lectures, 1922–1932. By divers hands. Edited by Warren R. Dawson. Macmillan & Co., 1932. $10'' \times 6\frac{1}{2}''$. xv + 304 Pp. Price 15° . 215 net.

The eleven lectures in this book have nearly all been previously published, either as they were delivered, or incorporated into larger works, and the value lies in the book as a whole as a record of the methods of the

last eleven years.

But beyond this, many of them expose clearly and definitely some question that has occupied attention in the period. Dr. Perry, Dr. Marett and Dr. Paul Rivet deal with the Diffusion of Culture, and the first especially is a model of clear exposition. Professor Malinowski puts his view of the place of Myth in Primi-tive Psychology in a nutshell. Sir Arthur Evans sums up the effect of recent Minoan Cretan discoveries upon the view of the early religion of Greece, and Sir Arthur Keith states the Aryan theory as it stands to-day. Collections of essays by various writers in one book have certain disadvantages, but these are outweighed in this case by the fact that we have in one volume the views upon current questions of so many ethnologists of the first rank. The book is also evidence that a much higher literary standard is creeping into scientific work. Mr. Warren Dawson is to be congratulated upon having such good stuff to edit and for having edited it so well, and the publishers upon the appearance and convenience H. C. L. or the volume.

Tradiciones y Cantares de Pánama. Ensayo Folklórico. By Narciso Garay. Brussels: Maison de l'Amérique Latine, 1930. 10½ × 8. n.p. 216

Pp. 203.

These essays, more or less popular in style, on the traditional arts of Panama include some valuable notes on the poetry, music and musical instruments of the Cuna and Guaymi Indians, and a collection of the folk songs and the ballad dances of the native-born Spanish-speaking inhabitants.

Cuna poetry, with non-metrical 'verses' of varying length, secures rhythm or at least cadence by the periodical repetition of final phrases, while it substitutes for final rhyme a sort of initial or median rhyme, by the repetition of an identical opening phrase in each verse. Mr. Garay's detailed description of the 'male ' and female' flutes and panpipes of the Cuna—telo and kamu or suarra—is particularly welcome.

The study of folklore and custom in Panama is not entirely free from nationalist associations; there is a tendency to class Indian informants as 'americanizing' or 'panamenizing,' 'loyal' or 'robel'; and this should perhaps be borne in mind in reading Mr. Garay's lively criticism of the work of Baron Nordenskiold and Miss Densmore, to say nothing of Mr. Marsh with his 'white

Indians.

The book is very well illustrated with photographs and coloured plates, which show a charming survival, in the creole costume, of early nineteenth century fashions from Europe.

BARBARA AITKEN.

The Psychology of Laughter: A Study in Social Adaptation. By Ralph Piddington, M.A. London: Figurehead, 18 Adam Street, Adelphi, 1933. 227 pp. Price 10s. 6d. net.

First Mr. Piddington criticizes nearly all his predecessors in this field, and does it remarkably well. Then, beginning de novo, he tries to determine the origin of laughter and, partly by the help of a consideration of its place in play, he finds that "biologically determined laughter expresses, maintains, and communicates a " mood in which there is no need felt for the organism to make any further adjustment to its environment " beyond the one at the moment existing." Turning now to 'the ludicrous' he urges that this always involves a situation in which there are two, or more, opposing social values excited, but no very deep feeling. Apparently one of those values grows out of an existing social order which is well founded, and perhaps conventional; but the other arises from social tendencies that threaten to break up this order. Laughter is a kind of way of compensating for whatever is serious in the threat of social subversion. But if we have to take the threat seriously and to find some way of genuinely building together the opposing values we very often weep. Laughter is thus the resort of the social conservative, and it may become his weapon if he employs it in a definitely 'corrective' sense. In all cases it is a mode of social adaptation.

The theory is interesting and to a large degree original. It is stated very clearly and concisely and is illustrated by a considerable amount of material drawn mainly from anthropological and ethnological studies. That it should seem over lumbersome and solemn when it deals with specific cases at least puts it at no particular disadvantage when it is compared with other theories.

An appendix gives a most excellent and useful historical summary of theories relating to laughter, beginning with Plato and ending with Dr. C. W. Kimmins, F. C. B.

The Secret of Laughter. By Anthony M. Ludovici. Constable & Co. London, 1932. 134 pp. 218

Mr. Ludovici is one of those latter-day pamphleteers desirous of rehabilitating human nobility. Lacking either the inclination or the industry to think about the prosaic but real disharmonies of modern civilization, he fulminates against petty foibles magnified into sins against the Holy Ghost.

This is the background of his entertaining and vigorous

essay on laughter. Without being a serious contribution to the scientific understanding of laughter, it has a kernel of shrewd insight. From Plato down to to-day philosophers have dogmatized about laughter, without reaching unanimity, as Mr. Ludovici's concise but excellent summary of the views of his predecessors shows. He himself resurrects Hobbes's acute theory, giving it an up-to-date vestment, and bringing it into relation with the Adlerian inferiority feeling. Laughter is an expression of 'superior adaptation,' genuine when we

have a sense of well-being or of superiority to others or feigned as a mask when we are feeling inferior. And the exaggerated importance which Mr. Ludovici dogmatically believes to be attached to laughter and humour (not distinguished by him) nowadays, indicates the inferiority modern man feels because of his degeneracy, and in the face of the complexity of civilization. It is, in fact, a cowardly escape from the necessity for serious thought. His additional animadversions upon the evolution of laughter need not detain us. M. F.

CORRESPONDENCE.

Act of Truth.

219 Sir,—Mr. Codrington is no doubt correct in suggesting (Man, 1933, 179) that throughout the East there are numerous methods of affirmation which have much in common with Acts

of Truth.

In Malaya, I have known more than one occasion where members of the Sikh community were engaged in litigation, in a case in which it was evident that one side or the other had committed perjury, despite the solemn affirmation to tell the truth, the whole truth and nothing but the truth, the plaintiff or defendant, as the case may have been, to challenge the other to take an oath in the Sikh temple before the priest, while holding in the palm of his hand a small piece of burning camphor. On such a challenge being accepted, and the oath taken, the challenger loses his case and judgment is given against him.

The Chinese in Malaya, are almost all from Southern China, and are mostly Cantonese and Hokkiens. With them the challenge is to cut off the head of a white cock with appropriate ceremonies, but no priest or temple enters into the matter. The bird, like the camphor of the Sikhs, has to be provided by the challenger. Under the provisions of the Civil Procedure Code the courts may allow such challenges to be given

and accepted.

I have never succeeded in ascertaining what the penalty is supposed to be for a false oath in the ordeal by burning camphor, but I have been assured that by the decapitation of a white cock, undefined but highly unpleasant consequences would overtake the perjurer in

this life.

In Malaya these challenges are falling into disuse owing to a change in public feeling. In the last case that I recollect of a Sikh challenge the court clerk returned into court with the parties saying that the priest had refused to allow the oath to be taken. It is now many years ago since I heard of a white cock being decapitated. In the last case I remember, I was told afterwards by the magistrate that several leading Chinese had expostulated

with him for allowing it.

I think Mr. Codrington is wrong in referring to the "Chinese oath by the broken plate . . . So let me "be broken." I have never met anyone who had heard of such an oath in China. Oaths are not mentioned in Sir George Staumton's translation (1804) of the Chinese Penal Code, nor in the French translation, published by the Jesuit college at Sicawai, near Shanghai, in the Variétés Sinologiques. No oaths are administered in Chinese courts, it being assumed by that sensible people that litigants are liars. The broken saucer used by Chinese witnesses in London police-courts was, I suspect, originally foisted on a credulous magistrate, who could not understand a witness having no form of oath, by an astute celestial in the early part of the nineteenth century.

Africa.

220 Sir,—I enclose a photo of some spears and a hoe found in the caves at the deserted copper mines at Hofra-en-Nahas by prospectors in 1923.



SPEARS AND HOE FOUND IN THE CAVES NEAR HOFRA-EN-NAHAS (SUDAN) BY PROSPECTORS, 1923. (Scale in centimeters)

The types are unknown to the present Bantu natives in the district.

A. E. ROBINSON.

W. E. Roth, Catalogue of Publications (cf. Man, 1933,

221 Add An Introductory Study of the Arts, Crafts, and Customs of the Guiana Indians, in Thirty-eighth Annual Report of the Bureau of American Ethnology, 1916-17. Washington, 1924.—[Ed. Max].

EYRE AND SPOTTISWOODE LIMITED, His Majestr's Printers, East Harding St., London, E.C.4.



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